

An illustrated type catalogue of Born's collection at the Natural History Museum Vienna. Part 1: Mollusca (Bivalvia and Scaphopoda), Brachiopoda

Anita Eschner¹, Paolo G. Albano², Katharina Mason¹, Ivo Gallmetzer¹

¹ Natural History Museum Vienna, Burgring 7, 1010 Vienna, Austria

² Stazione Zoologica Anton Dohrn, Villa Comunale, 80121 Naples, Italy

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Corresponding author: Anita Eschner (anita.eschner@nhm.at)

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Abstract

The Natural History Museum Vienna houses a valuable and rich mollusc collection that traces back to the early days of the Linnaean system of nomenclature. Its foundation was laid by Emperor Franz I Stephan of Lorraine through the acquisition of the extensive natural history collection of Johann Ritter von Baillou in 1748. After the Emperor's death, Ignaz von Born was commissioned to organise the imperial collection. Born began with the study of shells and produced a compact yet extensive book in 1778, containing numerous new species, followed by a lavishly illustrated version in 1780. He was among the first to adopt the Linnaean system, thereby making the names he introduced available according to the International Code of Zoological Nomenclature. Due to the high number of available names and the early publication of his works, Born's new species and the collection in Vienna play a pivotal role in molluscan taxonomy. Here, we present specimens from the Born collection bearing type status and belonging to Bivalvia, Scaphopoda, and Brachiopoda, including specimens illustrated by Born and later referred to by other authors for the introduction of new names (e.g., *Cardium oblongum* Gmelin, 1791; *C. ventricosum* Bruguière, 1789). We designated the lectotype of *Cardium aeolicum* Born, 1778 to stabilise the nomenclature. We considered the name *Cardium magnum* Born, 1780 to be unavailable, and thus its use for the designation of the type species of the genus *Dinocardium* inappropriate. Therefore, we designated *Cardium ventricosum* Bruguière, 1789 as the new type species of the genus.

Key Words

Catalogue, Ignaz von Born, lectotype designation, syntypes, taxonomy, type specimens

Introduction

The oldest and most important part of today's mollusc collection at the Natural History Museum in Vienna (NHMW) dates back to the mid-18th century. Emperor Franz I Stephan of Lorraine (1708–1765) had a great interest in the natural sciences, and in 1748 he acquired the large and renowned natural history collection of the Florentine scholar Chevalier Johann von Baillou (1684–1758). The collection comprised 30,000 objects, including rare molluscs, corals, fossils, gemstones, and minerals. Franz I Stephan greatly valued his collection, visited it almost daily (Fitzinger 1856), and added new, missing, and exotic

objects. For example, he paid 4,000 guilders for a then very rare specimen of the marine gastropod *Epitonium scalare*, the equivalent of the annual salary of one of his highest-ranking officials. After his death in 1765, Empress Maria Theresia transferred ownership of the collection to the state and ordered its reorganisation and systematic arrangement according to the latest scientific findings.

The person commissioned with this task by Maria Theresia in 1776 was the mineralogist, metallurgist, and malacologist Ignaz von Born (1742–1791). For detailed biographical information, see e.g., von Wurzbach (1857), Lindner (1986), Fischer (1992), Riedl-Dorn (1996), and Kelling (2014).

Originally, publications on the entire imperial collection were planned, as Born was convinced “that the primary purpose for which public natural history cabinets were founded remains unfulfilled so long as these treasures of nature are not made widely known through a complete description of their individual parts, and in this way, placed into the hands of anyone who might make use of them” (Born 1778). This was acknowledged one hundred years later by Friedrich Brauer, curator of the mollusc collection from 1865 to 1891, as evidence of “how correctly Born understood his mission” (Brauer 1878).

Born began the reorganisation of the zoological objects with a descriptive catalogue of the “Conchylia” entitled *Index rerum naturalium Musei Cæsarei Vindobonensis. Pars I.ma. Testacea*, published in 1778 (Fitzinger 1856). He was strongly supported in this endeavour by Sebastian Georg Helbling von Hirzenfeld (1751–1782), a young scientist whose valuable assistance Born explicitly acknowledged in the preface to his work. Furthermore, in the introduction, Born makes the following taxonomically important statements:

1. “In this catalogue, I can only include those natural objects actually housed in this cabinet”;
2. “[...] after careful examination of the major conchological works, I have chosen the Linnaean system [to describe the shells], because [...] it is still the most complete of those known to date, and gives the distinguishing features of genera, divisions, and species [...] in the clearest and most concise manner”;
3. “The shell species not included in the Linnaean system I have described according to the method of this renowned systematist, placed them into the families in which he himself would likely have arranged them, provided more detailed descriptions of their distinguishing features, and referred to the illustrations we will provide in our description of the Imperial and Royal Cabinet, both for these and for all others that have not yet appeared in any conchological work, or that have been poorly illustrated.”

The volume was published as a paperback containing bilingual descriptions in Latin and German, with additional vernacular names in English, French, and Dutch. As Born stated in the preface, this less costly, handier, and more accessible edition—seemingly prepared in parallel to the more luxurious final edition published two years later—was intended “to serve as a manual for those able to view the cabinet in person, and still give those naturalists who are far from the capital an adequate idea of the rarities it contains.” There is only one colour plate in this edition, depicting a specially shaped shell of a land snail.

At the request of the Empress and financed by her, the splendid edition *Testacea Musei Cæsarei Vindobonensis, quae jussu Mariae Theresiae Augustae disposuit et descripsit* was published two years later (Lindner 1986). Apart from minor deviations and additions, this edition contained the same Latin species descriptions as the 1778 version, as well as hand-coloured prints from copper plates that had

already been announced in the earlier edition. These 18 colour plates (seven of which are mainly dedicated to bivalves) were produced by Carl Schütz (1745–1800), a talented illustrator and engraver who was also responsible for all the other illustrations in the 1780 work. According to von Wurzbach (1857), this book was “... one of the most excellent on conchylology, [and it] is particularly characterised by the extremely finely and precisely worked illustrations.”

By adopting Linnaeus’ taxonomic system in these two unique volumes and by describing and illustrating many new species, Born’s name became inseparably linked with the oldest and most valuable part of the mollusc collection at the NHMW.

Over the centuries, however, not all curators and collaborators appreciated the importance of the original shells described by Born. Some were used for exhibitions, while others were exchanged or replaced with “better-looking” specimens (Eschner 2005, 2019). Various taxonomic systems were applied to reorganise the scientific collection over the years, further increasing the likelihood of specimen loss during reorganisation.

Friedrich Brauer (1832–1904) was the first curator to recognise the importance and value of tracing every single specimen described in Born’s books. In 1878, he stated: “During the organisation of the bivalves I noticed the round labels with letters and numbers on the valves [...]. On some specimens, I also found small, elongated square pieces of paper with very high numbers.” After thorough examination, Brauer was able to decipher the meaning of these strange labels and codes: “[...] I came to the conclusion that the above-mentioned narrow labels with high Arabic numerals always indicate specimens from Born’s time, that they are his catalogue numbers for each individual” (Brauer 1878).

In addition, he observed that “[...] many specimens in Born’s collection were exhibits that are very often labelled with larger square labels with larger Arabic numbers, or the smaller label is missing. Furthermore, the Vienna collection contains undoubted originals of Born’s work, illustrated down to the smallest defect or dirt stain, which are unmarked. Original specimens were found, confirming my above view, among discarded polished shells and among duplicates, as well as among indeterminate supplements (!).”

Brauer compiled the first comprehensive list of traceable Born specimens and published it in 1878, exactly one hundred years after the publication of Born’s *Index rerum naturalium Musei Cæsarei Vindobonensis*.

He also realised that knowledge regarding the whereabouts of the collection had been lost: “The fact that the existence of the original collection has so far remained unknown is also evident from the fact that Pfeiffer, Dunker, Weinkauff, Philippi and others, although they were in contact with Viennese conchylologists and went to the trouble of interpreting and investigating some species, never made an enquiry to the Imperial Museum and expressed an assumption about the whereabouts of the originals” (Brauer 1878).

In the following centuries, the “Born collection”—still incomplete—was kept separate from other material,

stored in the original drawers to honour and preserve its uniqueness. To date, several efforts have been made to locate missing specimens, and some have been successful. Despite the importance and value of this material, no type catalogue had been published until now. As part of a digitisation project at the NHMW, the entire Born collection was eventually digitised. This information is now compiled in this illustrated type catalogue to facilitate access to Born’s specimens for taxonomists. Due to the large number of species, the catalogue was divided into two parts: Part I is dedicated to Bivalvia, Scaphopoda, and Brachiopoda, while Part II will address Gastropoda. This endeavour follows the previous work on Rudolf Sturany (Albano et al. 2017, 2018, 2019, 2020).

Materials and methods

Curatorial work

This work is the result of almost 150 years of effort by curators, museum staff, and external researchers to trace, recognise, label, and properly store Born’s type material. In total, this catalogue presents 39 species, comprising all bivalves, scaphopods, and brachiopods with type status that are currently available (Table 1). For five bivalve species (*Ostrea maculata*, *Ostrea nucleus*, *Ostrea solaris*, *Tellina angulata*, and *Venus concentrica*), the type material has either been lost or has not been recognised in the main collection to date. In the case of a sixth species, *Pin-*

Table 1. List of the treated taxa in systematic order, with current family placement, original and current name, and page and figure number in this paper.

Current Family	Original Name	Current Scientific Name	Page	Figure
Mytilidae	<i>Mytilus pictus</i>	<i>Perna perna</i> (Linnaeus, 1758)	1695	Fig. 1
Arcidae	<i>Arca rhombea</i>	<i>Tegillarca rhombea</i> (Born, 1778)	1697	Fig. 2
Glycymeridae	<i>Arca scripta</i>	<i>Glycymeris scripta</i> (Born, 1778)	1698	Fig. 3
Pinnidae	<i>Pinna vexillum</i>	<i>Atrina vexillum</i> (Born, 1778)	1699	Fig. 4
Ostreidae	<i>Ostrea cristata</i>	<i>Dendostrea cristata</i> (Born, 1778)	1700	Fig. 5
Ostreidae	<i>Ostrea cuccullata</i>	<i>Saccostrea cuccullata</i> (Born, 1778)	1700	Fig. 6
Ostreidae	<i>Ostrea denticulata</i>	<i>Striostrea denticulata</i> (Born, 1778)	1703	Figs 7, 8
Pectinidae	<i>Ostrea cinnabarina</i>	<i>Chlamys islandica</i> (O. F. Müller, 1776)	1703	Fig. 9
Pectinidae	<i>Ostrea coarctata</i>	<i>Flexopecten flexuosus</i> (Poli, 1795)	1705	Fig. 10
Pectinidae	<i>Ostrea elongata</i>	<i>Manupecten pesfelis</i> (Linnaeus, 1758)	1707	Fig. 11
Pectinidae	<i>Ostrea miniata</i>	<i>Talochlamys pusio</i> (Linnaeus, 1758)	1708	Fig. 12
Pectinidae	<i>Ostrea pyxidata</i>	<i>Minnivola pyxidata</i> (Born, 1778)	1708	Fig. 13
Pectinidae	<i>Ostrea sulcata</i>	<i>Flexopecten glaber</i> (Linnaeus, 1758)	1710	Figs 14,15
Pectinidae	<i>Ostrea undata</i>	<i>Valochalmys tranquebaria</i> (Gmelin, 1791)	1711	Fig. 16
Limidae	<i>Ostrea bullata</i>	<i>Limatula bullata</i> (Born, 1778)	1711	Fig. 17
Limidae	<i>Ostrea scabra</i>	<i>Ctenoides scaber</i> (Born, 1778)	1714	Fig. 18
Carditidae	<i>Chama phrenitica</i>	<i>Beguinia semiorbiculata</i> (Linnaeus, 1758)	1715	Fig. 19
Cardiidae	<i>Cardium aeolicum</i>	<i>Lyrocardium aeolicum</i> (Born, 1778)	1716	Fig. 20
Cardiidae	<i>Cardium flavum</i>	<i>Laevicardium oblongum</i> (Gmelin, 1791)	1717	Fig. 21
Cardiidae	<i>Cardium imbricatum</i>	<i>Fragum fragum</i> (Linnaeus, 1758)	1719	Fig. 22
Cardiidae	<i>Cardium latum</i>	<i>Papyridea lata</i> (Born, 1778)	1719	Fig. 23
Cardiidae	<i>Cardium leucostomum</i>	<i>Acrosterigma magnum</i> (Linnaeus, 1758)	1722	Fig. 24
Cardiidae	<i>Cardium magnum</i>	<i>Dinocardium robustum</i> ([Lightfoot], 1786)	1722	Fig. 25
Cardiidae	<i>Cardium pectiniforme</i>	<i>Vasticardium pectiniforme</i> (Born, 1780)	1725	Fig. 26
Mactridae	<i>Mactra glauca</i>	<i>Mactra glauca</i> Born, 1778	1725	Fig. 27
Tellinidae	<i>Tellina punicea</i>	<i>Eurytellina punicea</i> (Born, 1778)	1727	Fig. 28
Tellinidae	<i>Tellina rugosa</i>	<i>Quidnipagus palatam</i> Iredale, 1929	1729	Fig. 29
Donacidae	<i>Venus paradoxa</i>	<i>Galatea paradoxa</i> (Born, 1778)	1729	Fig. 30
Psammobiidae	<i>Tellina anomala</i>	<i>Asaphis violascens</i> (Forsskål, 1775)	1729	Fig. 31
Arcticidae	<i>Venus buccardium</i>	<i>Arctica islandica</i> (Linnaeus, 1767)	1733	Fig. 32
Veneridae	<i>Venus callipyga</i>	<i>Circenita callipyga</i> (Born, 1778)	1734	Fig. 33
Veneridae	<i>Venus circinata</i>	<i>Lamelliconcha circinata</i> (Born, 1778)	1734	Fig. 34
Veneridae	<i>Venus mactroides</i>	<i>Tivela mactroides</i> (Born, 1778)	1736	Fig. 35
Veneridae	<i>Venus rivularis</i>	<i>Circe rivularis</i> (Born, 1778)	1737	Fig. 36
Veneridae	<i>Venus sinuata</i>	<i>Chamelea gallina</i> (Linnaeus, 1758)	1738	Fig. 37
Veneridae	<i>Venus undulata</i>	<i>Paratapes undulatus</i> (Born, 1778)	1740	Fig. 38
Hitaellidae	<i>Mya glycymeris</i>	<i>Panopea glycymeris</i> (Born, 1778)	1741	Fig. 39
Dentaliidae	<i>Dentalium striatum</i>	current species attribution uncertain	1742	Fig. 40
Terebratulidae	<i>Anomia vitrea</i>	<i>Gryphus vitreus</i> (Born, 1778)	1743	Fig. 41

na incurvata, Brauer mentioned the presence of a specimen in the exhibition that matched the size data in Born (1780) (Brauer 1878). One complete shell of this species is indeed available and was evidently part of the exhibition (as suggested by the characteristic old label), but it bears no further indication (e.g., inscriptions or a label with the original catalogue number) identifying it as the original specimen used by Born. It is also significantly smaller than the reported size. Therefore, it was not considered a type specimen.

Each species is presented with its original and current valid name, with page references to the original descriptions in Born (1778) and to the figures (if available) in Born (1780). We quoted the original descriptions in Latin and German, transcribing from blackletter, and added an English translation. In addition, we indicated locality data and specimen measurements provided by Born in the 1780 edition.

This catalogue also includes specimens from the imperial collection that are not type specimens of Born's species but still retain type value because they represent figured syntypes of species introduced by later authors (e.g., *Cardium oblongum* Gmelin, 1791; *Cardium ventricosum* Bruguière, 1789). Their type status is explained in the individual 'Remarks' sections.

All inventory numbers provided refer to the Mollusca collection of the NHMW. The official acronym is **NHMW-ZOO-MO-**, followed by the respective inventory number. The systematic arrangement follows Bouchet et al. (2010). The current taxonomic allocation follows WoRMS Editorial Board (2025).

Type status of Born's shells

Below the morphological descriptions, Born often listed bibliographic sources for the treated species, also in cases of new descriptions. Sometimes – though not always – he also specified the imperial collection in Vienna ("Mus. Caes. Vindobon." [*Musei Caesarei Vindobonensis*]) as a source. Even when this specification is missing, it can be assumed that the shells treated in Born's works were all part of the imperial collection, as he clarified in the preface to Born (1778) that he included in this catalogue "only those natural objects actually housed in this cabinet" (see above). Therefore, all specimens that were traced to belong to the imperial collection are here considered part of the type series, together with the illustrated shells from the plates of older cited works. That is, the type series is composed both of the specimens in the collection and of those indicated by bibliographic reference (art. 72.4; ICZN 1999). These illustrations do not always allow unambiguous identification and in some instances may represent different species from the specimens in the Born collection, a situation that justifies the designation of lectotypes to stabilise the nomenclature. However, we did so only when revisions were available to properly frame the taxonomic context (e.g., family Cardiidae). Tracing the correct bibliographic references for these

pre-Linnaean works was supported by the bibliography compiled by Caprotti (1994).

Holotype status was assigned to a specimen only when we found clear evidence that it was the sole reference specimen available to Born for his species description (art. 73.1.2; ICZN 1999). This applied only to some single-valved specimens, a fact that Born always mentioned explicitly, thereby unambiguously identifying the shell on which he based his description.

Shell sizes and measurements

In the 1780 edition, the original descriptions were supplemented with measurement data, provided in imperial units: "pol." (inch) and "lin." (line, 1/12 of an inch). Imperial units were not unified in Europe at the time, but it can be assumed that Born followed the regulations issued by Maria Theresia in 1756 concerning a state-defined measure of length for the Austrian Empire. Accordingly, 1 inch corresponded to 26.34 mm and 1 line to 2.195 mm (Kallbrunner 1917). We used these conversions to translate Born's measurements into metric data. Born gave two measures for bivalve shells: "Long." (Latin *longitudo*, length) for umbo-ventral height, and "Lat." (Latin *latitudo*, width) for antero-posterior length. For each species, Born's imperial measurements are listed, followed by their metric conversion in square brackets. In addition, new accurate measurements of the available specimens are provided ("H" for umbo-ventral height, "L" for antero-posterior length). In the case of multiple syntypes, matching original and new measurements—together with a high degree of resemblance to the original drawings (if available)—may help identify the specimens used by Born as the basis for his morphological descriptions. As evident in cases with unambiguous type specimens (e.g., *Mastra glauca*, *Venus paradoxa*, single valves only), a small discrepancy between new and original measurements is unavoidable due to measurement imprecision or imperfect unit conversion. In some cases, however, the sizes we measured differ considerably from those reported in Born's work, even when the figured specimen appears very similar to the actual specimen in the collection. Therefore, size alone was not considered a strong criterion for supporting type recognition.

Ambiguities in Born's description of shell orientation

For many bivalve species, Born's morphological descriptions invert the anterior and posterior shell regions. This does not appear to be an occasional error, but rather a systematic misconception, as evident from the explanation of certain terms in the glossary ("Partes Concharum" / "Erklärung") provided in Born's 1778 work. In that glossary, the anterior area (Latin: *Area Antica*, German: Vorderfläche) was defined as "the region outside the

ligament”, which corresponds to the escutcheon in modern terminology, located behind the beaks. Accordingly, the posterior area (*Areola* or *Area Postica*, Hinterfläche in German) is placed by Born on the opposite side of the beaks, thus corresponding to the lunule.

Imaging and plate composition

Shells were photographed using a Nikon D7200 DSLR camera equipped with a Nikon 60 mm macro lens and mounted on a Kaiser copy stand with a lighting unit. In addition to the standard views of bivalve shells (inner and outer surfaces of the right and left valves), other aspects of the shells were occasionally photographed to illustrate specific characteristics highlighted in Born’s morphological descriptions. Colour plates were compiled for each presented species separately and are complemented, where available, by scanned original drawings from the 1780 edition.

Systematic list of taxa

Phylum Mollusca Cuvier, 1797

Class Bivalvia Linnaeus, 1758

Family Mytilidae Rafinesque, 1815

***Mytilus pictus* (Born, 1778)**

Current name: ***Perna perna* (Linnaeus, 1758)**

Born common names: German: Die gefärbte Mießmuschel

Fig. 1

Born 1778: p. 111–112. No figure given.

Born 1780: p. 127. Plate VII, fig. 6 & 7.

Type material. Syntypes: NHMW-ZOO-MO-14489 (colour form α), 1 complete specimen; NHMW-ZOO-MO-14132 (colour form β), 1 complete specimen; NHMW-ZOO-MO-14133 (colour form γ), 1 complete specimen.

Original description.

Latin: *Testa ovata trilatera, grisea, laevi, antice carinata, apicibus acuminatis terminalibus, bidentatis.*

α) *grisea, unicolor.* β) *grisea, lineis angulatis rufis.* γ) *ex luteo virens, maculis laete viridibus, lineis angulatis rufis.*

Testa ovato elongata laevis, antice carinata, postice complanata hians, ideoque trilatera, Apices terminales acuminati, dentibus duobus acutis validis, mutuo insertis, extus conspicuis. Cavitas variegante nitore resplendens. Priori similis, qua tamen gracilior, colore insuper dentiumque structura praecipue distinguitur.

German: Die eiförmige, dreyseitige, lichtgraue glatte Schale ist vorne mit einem kielförmigen Rande, und an den Endspitzen mit zween Zähnen versehen.

α) lichtgrau, einfärbig. β) lichtgrau, mit rothbraunen Winkelzügen. γ) gelblich grün, mit hellgrünen Flecken, und rothbraunen Winkelzügen.

Die eiförmige verlängerte glatte Schale ist vorne kielförmig erhoben, hinten flachgedrückt klaffend, und daher dreiseitig. Die Spizen stehen an einen verdünnten Ende, wo sich zwei starke spizige von außen sichtbare Zähne befinden. Die Höhlung hat einen bunten Glanz. Diese Art ist der vorigen ähnlich, aber schmähler, und weicht davon durch die Verschiedenheit der Farbe und der Zähne vorzüglich ab.

Translation into English: The ovate, triangular, light-grey, smooth shell is keel-shaped at the anterior end and has pointed, terminal umbos with two small teeth.

α) light-grey, unicolour. β) light-grey, with red-brown co-marginal zig-zag lines. γ) yellow-greenish, with light-green specks and red-brown co-marginal zig-zag lines.

The shell is elongated-ovate and smooth, keeled at the front, flattened at the back, and gaping, thus appearing triangular. The terminal umbos are pointed, with two sharp, conspicuous and interlocking teeth visible from the outside. The interior cavity shines with a variegated lustre. Similar to the previous one but more slender, distinguished mainly by its colour and the structure of its teeth.

Additional remarks from Born 1780.

– **Common Names:** French: Moule arborisée *Davila*

– **Size:** α) Long. 4. poll. 6. lin, lat. 2. poll. 2. lin. [118.5 mm, 57.1 mm]
 β) & γ) Long. 4. poll. 2. lin, lat. 1. poll. 9. lin. [109.8 mm, 46.1 mm]

– **Locality:** Habitat in Indiis.

New measurements. NHMW-ZOO-MO-14489 (colour form α): H: 98.3 mm, L: 49 mm; NHMW-ZOO-MO-14132 (colour form β): H: 113.5 mm, L: 45.5 mm; NHMW-ZOO-MO-14133 (colour form γ): H: 91.7 mm, L: 46.7 mm.

Remarks. Specimens representing the variant “ α ” had been reported missing (Brauer 1878), but we were able to locate them in the main collection. Therefore, specimens representing all three colour variations are now available. A molecular phylogeny of genus *Perna* showed that three species occur within distinct biogeographic regions: *Perna viridis* (Linnaeus, 1758) in the northern and eastern Indian Ocean, *P. perna* (Linnaeus, 1758) in the Atlantic Ocean, and *P. canaliculus* (Gmelin, 1791) in New Zealand (Wood et al. 2007). Born clarified that the species occurred “in Indiis” (Born 1780), which in the 18th century was used as a term encompassing a broad area in south-eastern Asia where *P. viridis* occurs. He also mentioned the figure by Knorr (1769), who, however, did not report locality information. It has been hypothesised that *P. perna* was introduced in the south-western Atlantic (Silva et al. 2018) and that populations in India are the consequence of a colonisation event dating back at least a century, although it remains unclear whether this latter case was caused by humans or was the result of a natural range extension (Gardner et al. 2016). The morphology of Born’s specimens matches the one of *P. perna*, as also highlighted by Huber (2010). Assuming locality information is accurate, this is evidence for the occurrence of *Perna perna* in southern Asia 200 years earlier than currently considered.

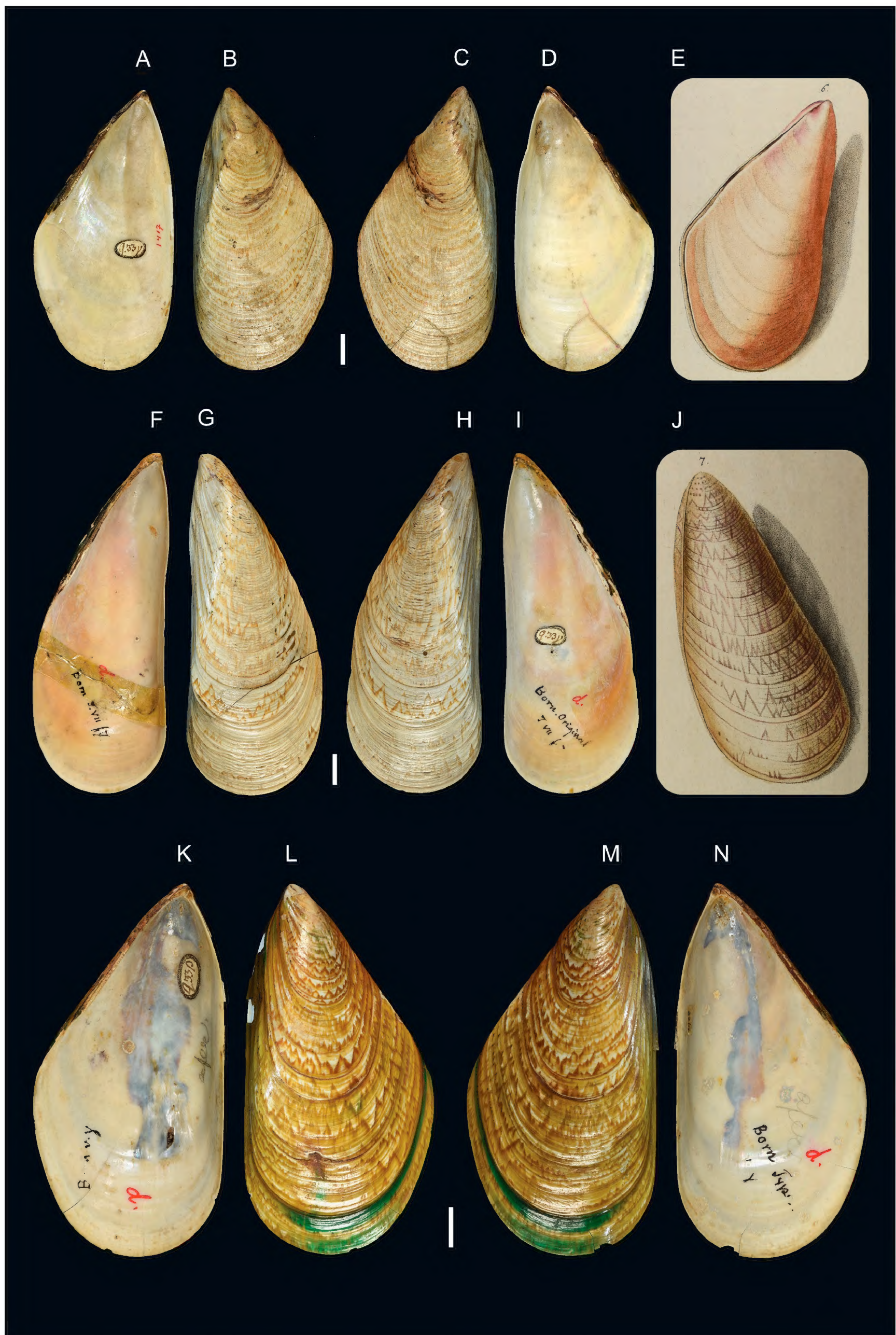


Figure 1. *Mytilus pictus* (Born, 1778). **A–E.** Syntype NHMW-ZOO-MO-14489 (colour form α): left valve interior (**A**) and exterior (**B**), right valve exterior (**C**) and interior (**D**), figure from Born (1780), Plate VII, No. 6 (**E**). **F–J.** Syntype NHMW-ZOO-MO-14132 (colour form β): left valve interior (**F**) and exterior (**G**), right valve exterior (**H**) and interior (**I**), figure from Born (1780), Plate VII, No. 7 (**J**). **K–N.** Syntype NHMW-ZOO-MO-14133 (colour form γ): left valve interior (**K**) and exterior (**L**), right valve exterior (**M**) and interior (**N**). Scale bars: 1 cm.

Family Arcidae Lamarck, 1809***Arca rhombea* Born, 1778**Current name: ***Tegillarca rhombea* (Born, 1778)**

Born common names: German: Das Rautenkörbchen

Fig. 2

Born 1778: p. 76–77. No figure given.

Born 1780: p. 90–91. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14094, 1 complete specimen; NHMW-ZOO-MO-14093, 1 right valve; Knorr (1769), Part 4, plate XIV, fig. 2; Lister (1687), fig. 75.

Original description.

Latin: *Testa cordata, multisulcata, costis mediis transversim striatis, apicibus incurvatis remotis, area cardinis rhombea.*

Testa cordata, aequivalvis, longitudinaliter sulcata, costis 26, intermediis transversim striatis. Apices incurvato recurvi, remoti. Area intersecta plana, vere rhombea, lineis incites rhomborum concentricorum figuram exacte referentibus; ligamentum membranaceum aream obtegens, incisuras lineares explens. Sutura cardinis intus armata dentibus minutis, diagonalem areae majorem constituit.

German: Die herzförmige Schale hat viele Furchen, die Ribben sind in die Quere gestreift, die Spizen einwärts gerollet, und die Angelfläche rautenförmig.

Die Schale ist herzförmig, gleichklappig, nach der Länge gefurchet, mit 26. Ribben, davon die mittleren in die Quere gestreift sind. Die Spitzen sind einwärts gerollet, etwas zurückgekrümmt, und von einander entfernt. Die dazwischen liegende Angelfläche ist genau rautenförmig, auf welcher gleichfalls rautenförmige in einander liegende Linien ausgeschnitten sind. Das hautige Band bedeket die ganze Angelfläche und versenket sich in die

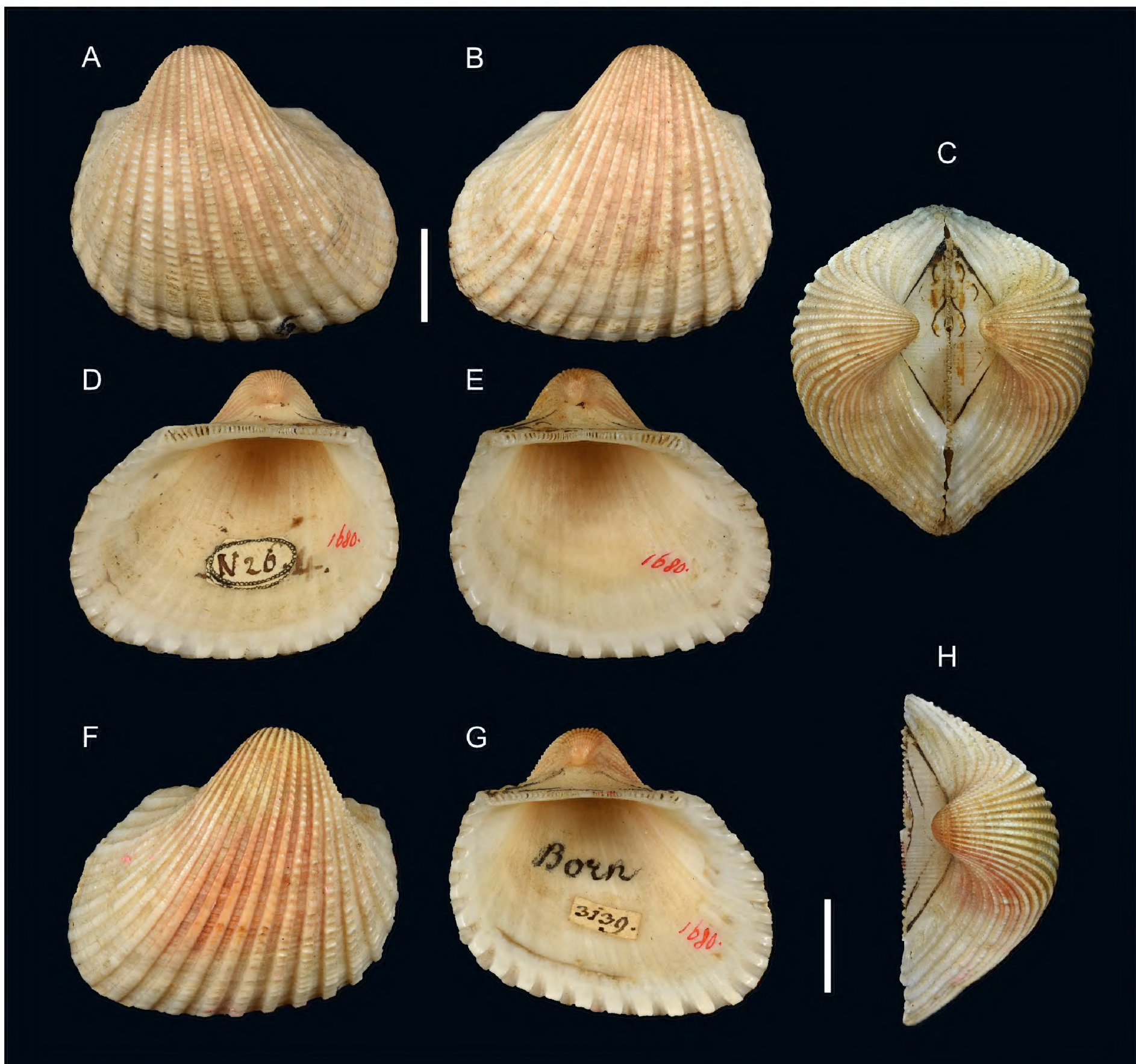


Figure 2. *Arca rhombea* Born, 1778. **A–D.** Syntype NHMW-ZOO-MO-14094: left valve exterior (**A**) and interior (**D**), right valve exterior (**B**) and interior (**E**), dorsal view of hinge area (**C**). **F–H.** Syntype (single right valve) NHMW-ZOO-MO-14093: exterior (**F**), interior (**G**) and dorsal view (**H**). Scale bars: 1 cm.

ausgeschnittenen Rautenlinien. Die Nath des Angels bildet die größere Diagonallinie, und ist inwendig mit einer Reihe kleiner Zähne besetzt.

Translation into English: Shell heart-shaped and densely furrowed, middle ribs transversally striped, beaks curved inwards and distant from each other, the cardinal area rhombic.

The shell is heart-shaped, equivalve, and furrowed longitudinally, featuring 26 ribs, the middle ones transversally striped. The beaks are curved inwards, pointing slightly to the posterior, with a gap in between. The cardinal area is flat, precisely rhombic, and carved with a similarly rhombic line pattern. The membranous ligament covers the entire cardinal area and is inserted in the carved rhombic lines. The hinge plate, on the inside, is lined with a series of small teeth and constitutes the larger diagonal line of the rhombic cardinal area.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 1. lin; lat. 1. poll. 4. lin. [28.5 mm; 35.1 mm]

– **Locality:** Habitat in India orientali, Lister.

New measurements. NHMW-ZOO-MO-14093: H: 28.4 mm, L: 33.21 mm. NHMW-ZOO-MO-14094: H: 32.78 mm, L: 35.37 mm.

Family Glycymerididae Dall, 1908 (1847)

***Arca scripta* Born, 1778**

Current name: ***Glycymeris scripta* (Born, 1778)**

Born common names: German: Die gezeichnete Kuchenmuschel

Fig. 3

Born 1778: p. 79–80. No figure given.

Born 1780: p. 93. Plate VI, fig. 1a & 1b.

Type material. Syntypes: NHMW-ZOO-MO-14101, 1 right valve; Lister (1687), fig. 80.

Original description.

Latin: *Testa orbiculari convexa laevi, lineis angulatis fulvis picta, apicibus incurvis, limbo crenato.*

Testa convexa laevis, striis longitudinalibus tenuissimis, ut in A. pilosa, cujus forte varietas est. Area declivis, angustata. Cardo rectus linearis. Dentes intus 20 in arcum digesti, extimi utrinque crassiores. Ambitus orbicularis. Limbus crenatus.

German: Die Schale ist rund und gewölbt, von glatter, und mit gelbbraunen Winkelzügen bemahlter Oberfläche. Die Spizen sind einwärts gekrümmt, der innere Rand gekerbet.

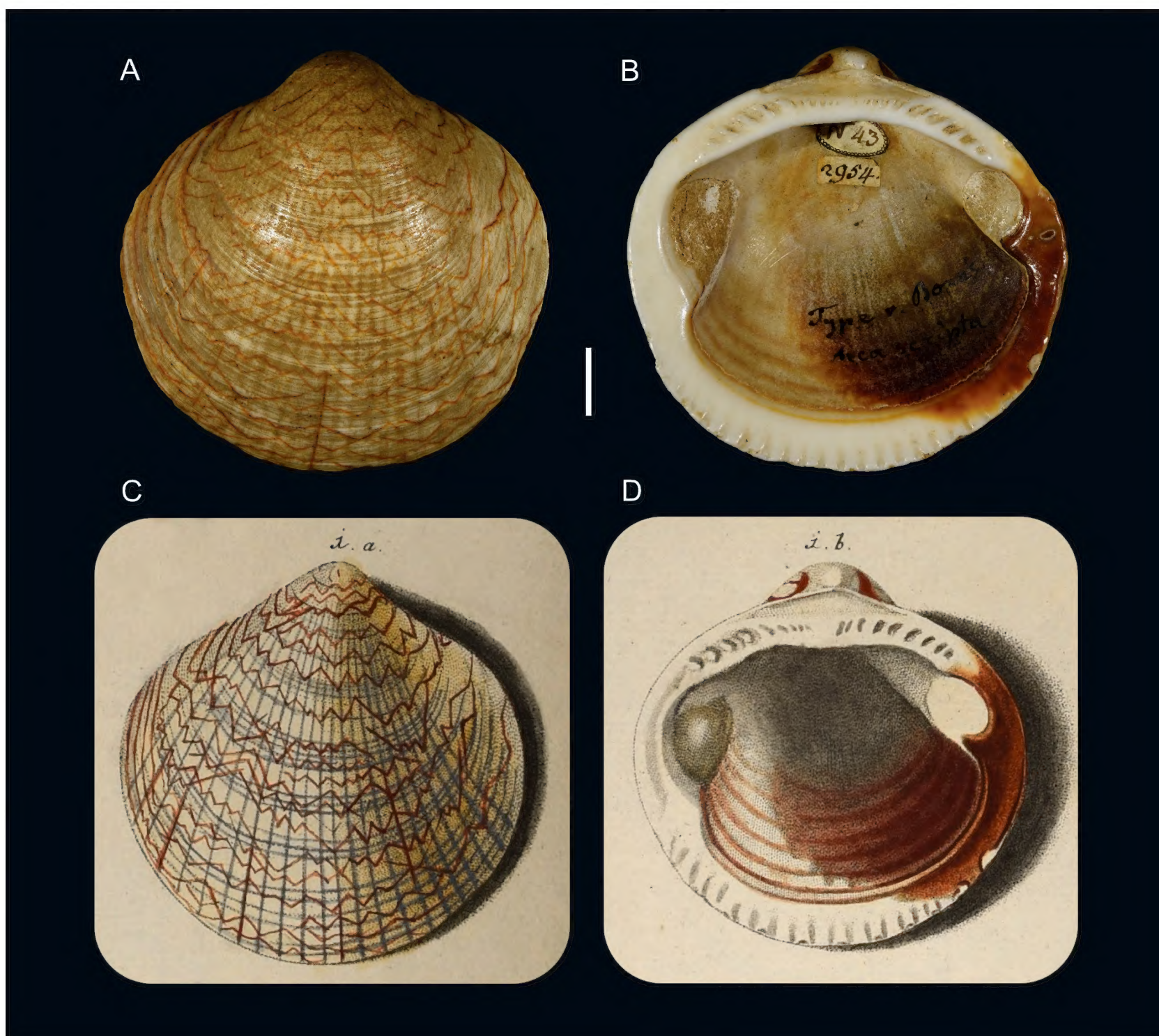


Figure 3. *Arca scripta* Born, 1778. Syntype NHMW-ZOO-MO-14101, right valve only: exterior (A) and interior (B), figures from Plate VI, No. 1a and 1b (C, D). Scale bar: 1 cm.

Die Schale ist gewölbt, und der Länge nach wie die Sammtmuschel, davon sie vielleicht eine Abänderung ist, sehr zart gestreift. Die Schloßfläche ist einwärts abhängig, und schmal. Die Schloßlinie gerade. Inner derselben stehen 20 Zähne in bogenförmiger Stellung. Der Umfang ist zirkelrund. Der innere Rand gekerbt.

Translation into English: The shell is round, convex, and has a smooth surface with yellow-brownish zig-zag lines. The beaks are curved inwards, and the inner margin is crenulate.

The shell is convex and delicately striped lengthwise, similar to *A. pilosa*, of which it may be a variation. The hinge area is inwardly sloping and narrow, the hinge line straight. Inside, there are 20 teeth in an arcuated arrangement [only in the Latin version: the external ones larger on both sides]. The perimeter is circular, and the inner margin crenulate.

Additional remarks from Born 1780.

– **Size:** Long. 2. poll. 4. lin., lat. 2. poll. 4. lin. [61.5 mm, 61.5 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14101: H: 61.45 mm, L: 63.34 mm.

Family Pinnidae Leach, 1819

Pinna vexillum Born, 1778

Current name: *Atrina vexillum* (Born, 1778)

Born common names: German: Die Fahne

Fig. 4

Born 1778: p. 118. No figure given.

Born 1780: p. 134. Plate VII, fig. 8.

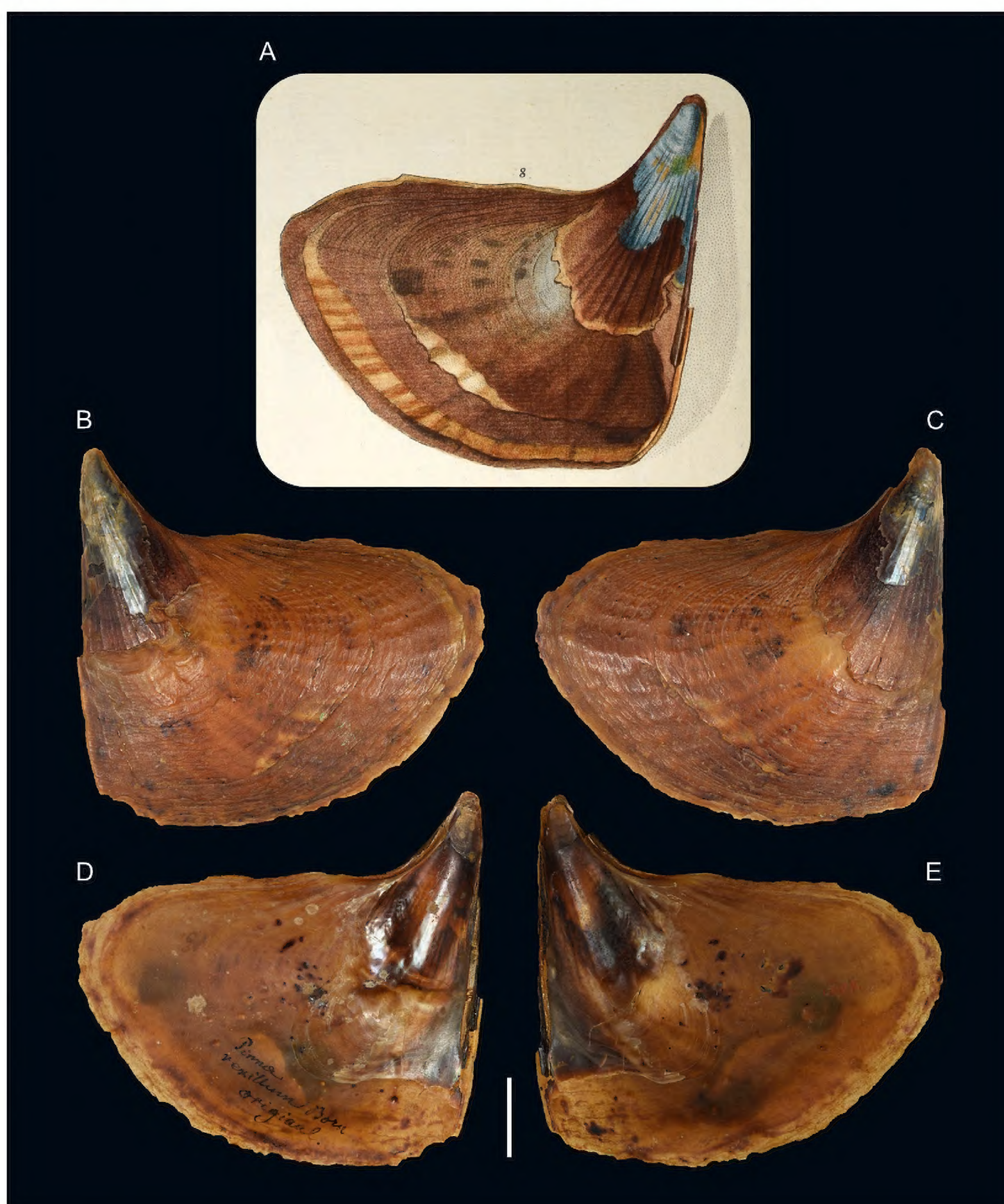


Figure 4. *Pinna vexillum* Born, 1778. Syntype NHMW-ZOO-MO-14140: figure from Born (1780), Plate VII, No. 8 (A), left valve exterior (B), right valve exterior (C), left valve interior (D), right valve interior (E). Scale bar: 2 cm.

Type material. Syntype: NHMW-ZOO-MO-14140, 1 complete specimen.

Original description.

Latin: *Testa fastigiato triangula laevi, margine postico excurrente lobiformi.*

Testa fastigiata, convexa, crassa, laevis. Valvae triangularae, extremitate una attenuata, opposita obtusa, lata; Margo posticus curvilineus, supra excurrens lobiformis. Color fuscus.

German: Die zugespitzte dreieckige glatte Schale hat einen lappenförmig ausgebreiteten Vorderrand.

Die Schale ist zugespitzt, bäuchig, dick und glatt. Die Klappen sind dreieckig, das eine End zugespitzt, das andere stumpf und breit. Der Hinterrand ist krummlinig, und oben zu lappenförmig ausgebreitet. Von brauner Farbe.

Translation into English: Shell pointed, triangular, and smooth, with a broadened, lobe-shaped posterior margin.

The shell is pointed, bulging, thick, and smooth. The valves are triangular, with one end pointed and the other blunt and broad. The posterior margin is curved and broadened into a lobe on the upper side. Brown in colour.

Additional remarks from Born 1780.

– **Size:** Long. 3. poll. 8. lin., lat. 4. poll. 2. lin. [96.6 mm, 109.8 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14114: H: 108.64 mm, L: 108.85 mm.

Remarks. The type status of this specimen was assessed by Schultz and Huber (2013), who described it as the holotype. However, it is not clear from Born's description whether this specimen was the only reference specimen at his disposal. Therefore, we consider it as the only currently known syntype of the species rather than the holotype.

Family Ostreidae Rafinesque, 1815

***Ostrea cristata* Born, 1778**

Current name: *Dendostrea cristata* (Born, 1778)

Born common names: German: Die Kammauster

Fig. 5

Born 1778: p. 98. No figure given.

Born 1780: p. 112. Plate VII, fig. 3.

Type material. Syntypes: NHMW-ZOO-MO-14117, 1 complete specimen; Gualtieri (1742), plate 104, fig. F.

Original description.

Latin: *Testa rotundata, lamellis imbricatis, margine obtuse plicato, dentato, apice altero porrecto.*

Testa inaequalivalvis membranis imbricatis rugosis. Margo repandus, obtuse plicato dentatus. Apex valvae alterius parasiticae longior, prominens. Cardinis tendo medius latus conicus. Color albus, maculis dispersis nigris.

German: Die rundliche Schale ist mit Blättchen ziegelförmig besetzt, am Rande stumpf, und zahnförmig gefalten. Eine Schloßspize ragt hervor.

Die Schale welche aus ungleichen Klappen besteht, ist mit runzelichten Blättern ziegelförmig besetzt. Der Rand ausgeschweifet, mit stumpfen zahnförmigen ineinander beißenden Falten. Die Spitze der aufsitzenden Schale ist verlängert, und in die Höhe gestreckt. In der Mitte des Schloßes ist ein breiter kegelförmiger Knorpel. Die Farbe ist weiß mit zerstreuten schwarzen Flecken.

Translation into English: Roundish shell adorned with stacked laminae, margin forming blunt, tooth-shaped folds, the beak of one valve protruding.

The inequivalve shell is adorned with wrinkled, stacked laminae. The margin is bent inwards, forming blunt, interlocking tooth-shaped folds. The beak of the upper valve is elongated and points upward. In the centre of the hinge plate, there is a broad, cone-shaped ligament. The colour is white with scattered black blotches.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 10. lin., lat. 1. poll. 4. lin. [48.3 mm, 35.1 mm]

– **Locality:** Patria nobis ignota.

New measurements. NHMW-ZOO-MO-14117: H: 41.9 mm, L: 37.22 mm.

***Ostrea cuccullata* Born, 1778**

Current name: *Saccostrea cuccullata* (Born, 1778)

Born common names: German: Die Runzelkappe

Fig. 6

Born 1778: p. 100. No figure given.

Born 1780: p. 114. Plate VI, fig. 11 & 12.

Type material. Syntypes: NHMW-ZOO-MO-14118: 1 complete specimen, NHMW-ZOO-MO-14119: 1 left valve.

Original description.

Latin: *Testa inaequalivalvi plicato rugosa, margine dentato, intus striato, valva majore cuccullata.*

Testa solida, ponderosa, plicis longitudinalibus, rugisque transversis inaequalis. Valvae inaequales; altera cuccullata, rudi apice porrecto, postice longitudinaliter secto; altera minore plana. Margo utriusque obtuse dentatus. Limbus striis distantibus elevatis geminis. Color extus atro violaceus.

German: Die ungleiche Schale ist gefalten, und runzelicht, der Rand gezähnt, und inwendig gestreifet, die größere Klappe kappenförmig.

Die dichte schwere Schale ist der Länge nach mit breiten Falten, und in die Quere mit Runzeln besetzt. Die Klappen sind ungleich, die eine kappenförmig, rauh, mit hervorragender stumpfen Spitze, die hinten flach abgeschnitten ist; die andere ist kleiner und flach. Der Rand beider Klappen hat stumpfe Zähne. Am Innerrande sind erhabene paarweis stehende Streifen. Die Farbe ist auswändig dunkelviolet.

Translation into English: The shell is inequivalve, with folds and wrinkles; the margin is dentate and striated internally; the larger valve is cap-shaped.



Figure 5. *Ostrea cristata* Born, 1778. A–D. Syntype NHMW-ZOO-MO-14117: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). Figure from Born (1780), Plate VII, No. 3 (E); left valve exterior in the same position as in the drawing to illustrate similarity (F). Note the ear-shaped oyster shell attached on top of the specimen, readily recognisable in the drawing. The additional small shell attached on the right edge in the drawing was seemingly lost; an attachment scar is still visible on the specimen. Scale bar: 1 cm.

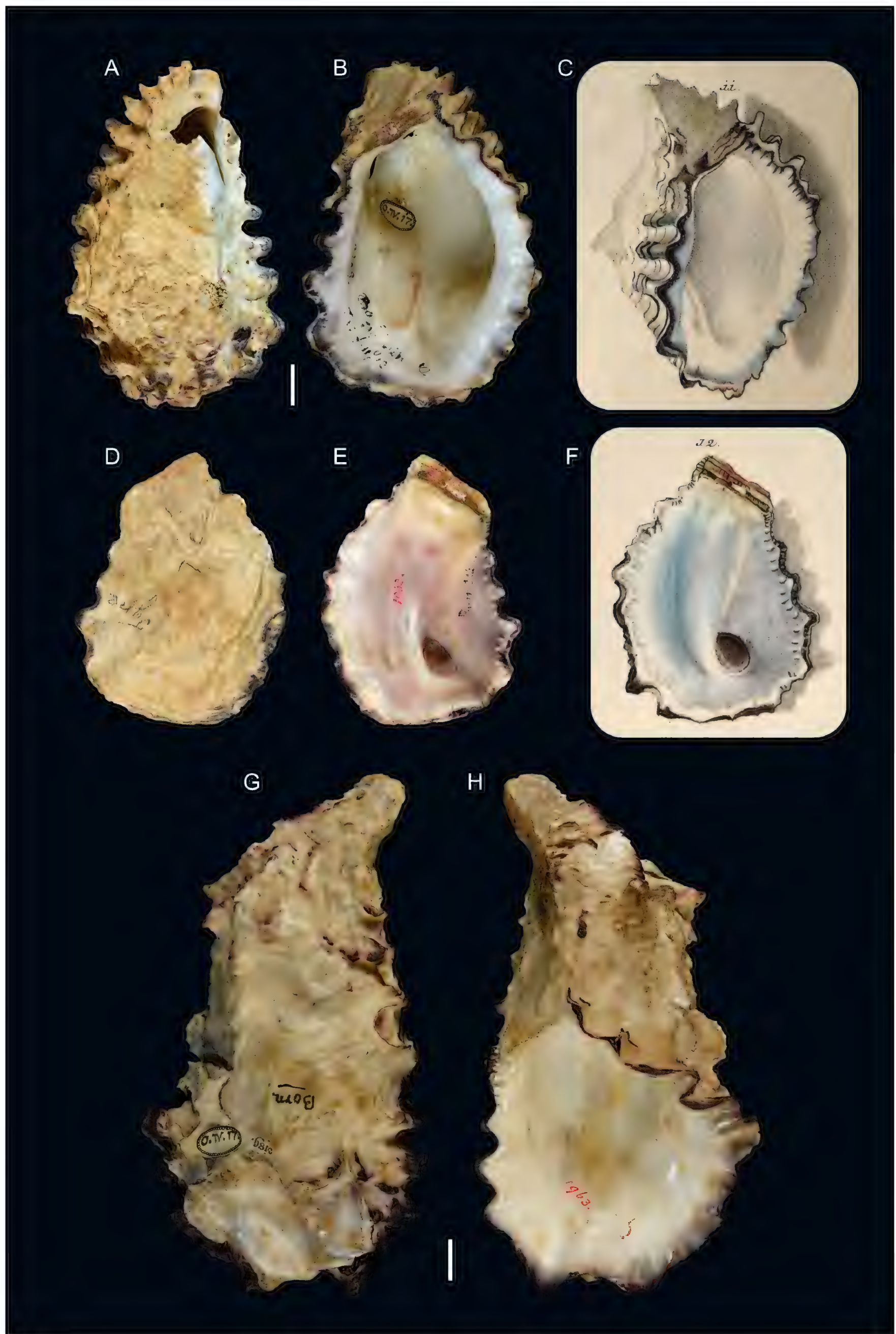


Figure 6. *Ostrea cucullata* Born, 1778. **A–F.** Syntype NHMW-ZOO-MO-14118: left valve exterior (**A**) and interior (**B**), right valve exterior (**D**) and interior (**E**), figures from Born (1780), Plate VI, No. 11 and 12 (**C**, **F**). **G**, **H.** Syntype NHMW-ZOO-MO-14119, left valve only: exterior (**G**) and interior (**H**). Scale bars: 1 cm.

The dense, heavy shell has broad longitudinal folds and transversal wrinkles. The valves are unequal: one is cap-shaped, rough, with a prominent blunt tip flattened on the backside; the other is smaller and flat. The margin of both valves has blunt teeth. Along the inner margin there are raised, paired striae. The colour of the outer surface is dark violet.

Additional remarks from Born 1780.

- **Common Names:** French: Corne d'Abondance *Davila*
- **Size:** Long. 5. poll., lat. 2. poll. 8. lin. [131.7 mm, 70.2 mm]
- **Locality:** Habitat in Indiis, *Davila*; ad insulam Ascensionis, *Martini*.

New measurements. NHMW-ZOO-MO-14118 (left valve): H: 84.1 mm, L: 61.2 mm. NHMW-ZOO-MO-14119: H: 125 mm (total height), L: 67 mm.

***Ostrea denticulata* Born, 1778**

Current name: *Striostrea denticulata* (Born, 1778)

Born common names: German: Die gezähnelte Auster

Fig. 7

Born 1778: p. 99. No figure given.

Born 1780: p. 113–114. Plate VI, fig. 9 & 10.

Type material. Syntype: NHMW-ZOO-MO-14120, 1 complete specimen.

Original description.

Latin: *Testa rotundata foliacea, valva altera plana parasitica, cardine utrinque denticulato.*

Testa inaequalvis, valva altera convexa subovata glabra, altera explanata, rotunda, majore, parasitica. Cartilago latissimus nitidus, Latera postica utrinque acute denticulata, inserenda foveolis testae oppositae.

German: Die rundliche blätterige Schale hat eine flache aufsitzende Klappe, und an beiden Seiten des Schloßes keine Zähnen.

Die Klappen der Schale sind ungleich, deren eine etwas bauchig eyförmig und glatt, die andere aber, welche aufsitzt, ist flachgedrückt, rundlich und größer. Der Knorrel ist sehr breit und glänzend. An den Seiten des Schloßes ist beiderseits eine Reihe kleiner spiziger Zähne, die in die Grübchen der entgegen gesetzten Schale einbeißen.

Translation into English: Shell roundish and foliate, the valve attached to the substrate flattened, hinge denticulate on both sides.

The shell is inequivalve: one valve is convex, somewhat egg-shaped, and smooth; the other one, which is attached to the substrate, is larger, flattened, and rounded. The ligament is very broad and shiny. On either side of the hinge, there is a row of small, pointed teeth that fit into the grooves of the opposite valve.

Additional remarks from Born 1780.

- **Size:** Long. 6. poll. 3. lin., lat. 6. poll. [164.6 mm, 158 mm]
- **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14120: H: 101.3 mm, L: 97.1 mm.

Remarks. In addition to specimen NHMW-ZOO-MO-14120, the collection contained a second bivalve (NHMW-ZOO-MO-14121, Fig. 8) that was assigned by past curators to this species (Brauer 1878). However, this latter specimen clearly belongs to a different species, and—in the absence of further evidence (e.g., an illustration matching the specimen, measurements fitting those provided by Born, the presence on the shell of a small rectangular label with a high number, etc.)—we do not consider it to be part of the material used by Born for the description of *Ostrea denticulata* and thus not a part of the type series. In addition, 14120 is virtually identical to the specimen figured in Born's 1780 work and matches features contained in the original description, in particular the foliose sculpture that is absent in specimen 14121. Therefore, we here consider specimen 14120 the only currently known syntype for *Ostrea denticulata*.

Family Pectinidae Rafinesque, 1815

***Ostrea cinnabarina* Born, 1778**

Current name: *Chlamys islandica* (O.F. Müller, 1776)

Born common names: German: Der bandirte Mantel; Belgian: Gebanderde Mantel; French: Manteau bandé

Fig. 9

Born 1778: p. 87–88. No figure given.

Born 1780: p. 103–104. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14107, 2 complete specimens; Gualtieri (1742), plate 73, fig. C; Regenfuss (1758), plate 3, fig. f and plate 4, fig. 38; Knorr (1769), Part 5, plate XV, fig. 1.

Original description.

Latin: *Testa aequivalvi, radiis numerosis inaequalibus, transversim rugulosis.*

Testa rotundata, magna, convexiuscula, aequivalvis, longitudinaliter multisulcata; Radii numerosi inaequales, striis transversis undulatis decussati; auricula altera latior, antice excisa, margine ciliato. Color extus cinnabarinus, cingulis aliquot pallidis.

German: Die gleichklappige Schale ist mit sehr vielen ungleichen, und in die Quere gestreiften Strahlen versehen.

Die rundliche große, etwas bäuchige und gleichklappige Schale ist der Länge nach gefurchet. Die häufigen Strahlen sind ungleich, und mit wellenförmigen Querstreichen durchkreuzet. Ein Ohr ist breiter, vorne ausgeschnitten, und am Rande rauh. Die ganze Schale ist auswendig zinnoberroth mit blassen Querreifen.

Translation into English: Shell equivalve, with numerous, transversally wrinkled ribs of different sizes.

The large, rounded, slightly bulging, equivalve shell is furrowed longitudinally. The numerous ribs are of different sizes and intersected by wavy cross lines. One auricle is broader, notched anteriorly, with a rough margin. The entire outer shell is vermilion red with pale, co-marginal bands.

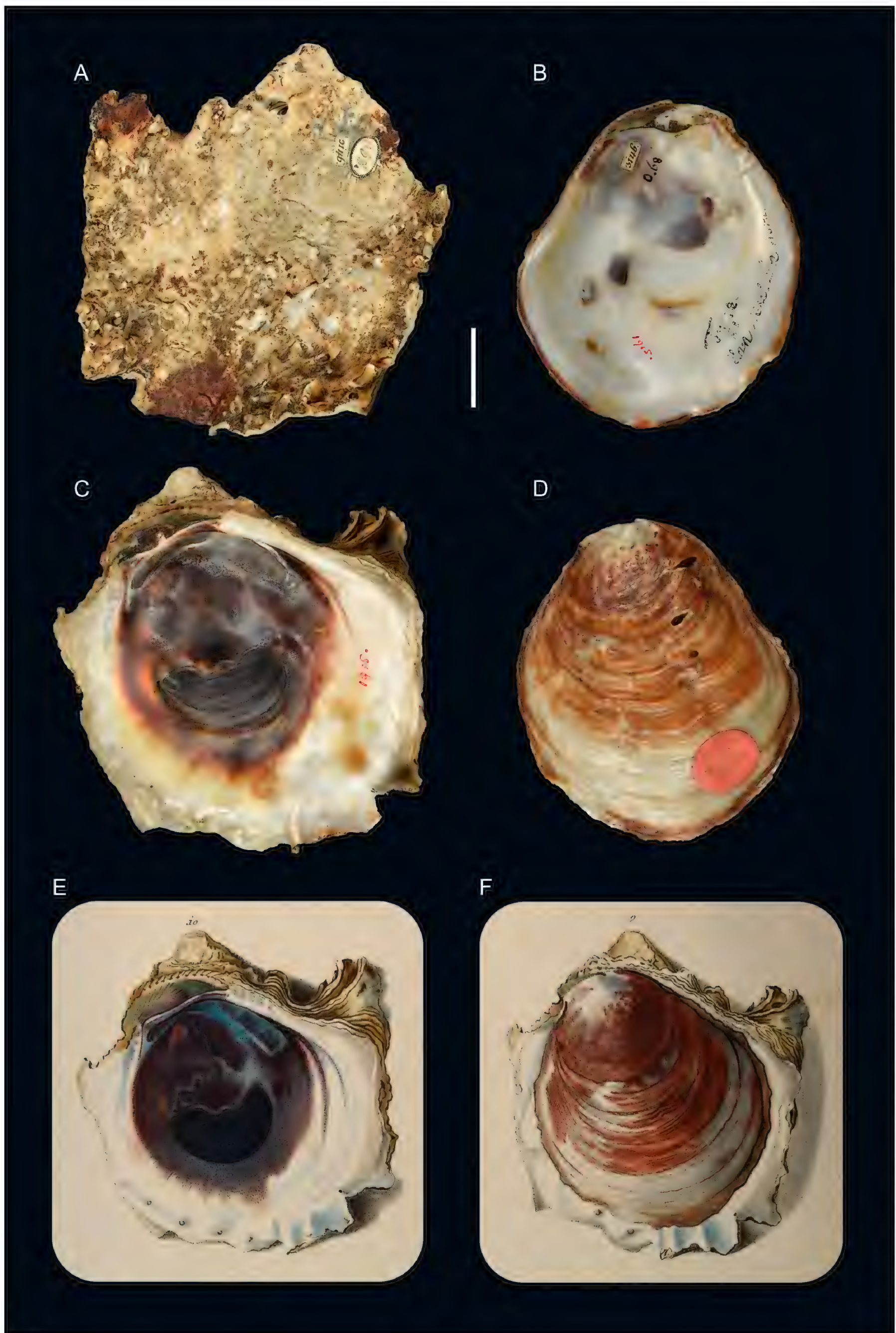


Figure 7. *Ostrea denticulata* Born, 1778. Syntype NHMW-ZOO-MO-14120: left valve exterior (A) and interior (C), right valve interior (B) and exterior (D), figures from Born (1780), Plate VI, No. 9 and 10 (E, F). Scale bar: 2 cm.

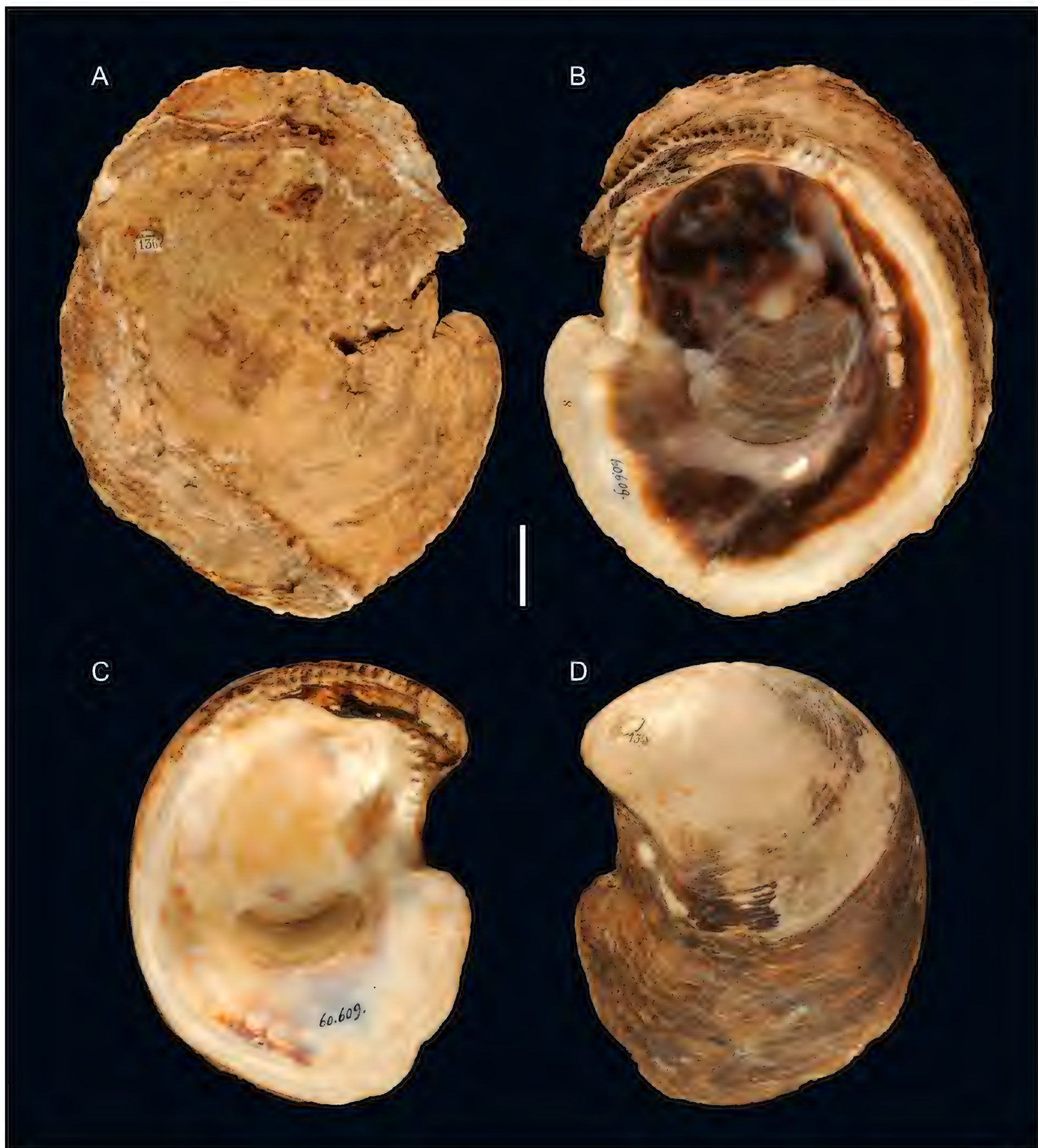


Figure 8. Not *Ostrea denticulata* Born, 1778, but assigned by past curators to this species (see Remarks to *Ostrea denticulata*), NHMW-ZOO-MO-14121: left valve exterior (A) and interior (B), right valve interior (C) and exterior (D). Scale bar: 3 cm.

Additional remarks from Born 1780.

- **Size:** Long. 3. poll, 5. lin., lat. 3. poll. 5. lin. [90 mm, 90 mm]
- **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14107, syntype 1: H: 96.6 mm, L: 96.6 mm. NHMW-ZOO-MO-14107, syntype 2: H: 84.5 mm, L: 78.2 mm

Remarks. The type status of these specimens and further taxonomic issues were discussed by Dijkstra (2009).

***Ostrea coarctata* Born, 1778**

Current name: *Flexopecten flexuosus* (Poli, 1795)

Born common names: German: Das Schüsselchen

Fig. 10

Born 1778: p. 90–91. No figure given.

Born 1780: p. 106. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14108, 2 left valves; Knorr (1769), Part 2, plate XXI, fig. 5.

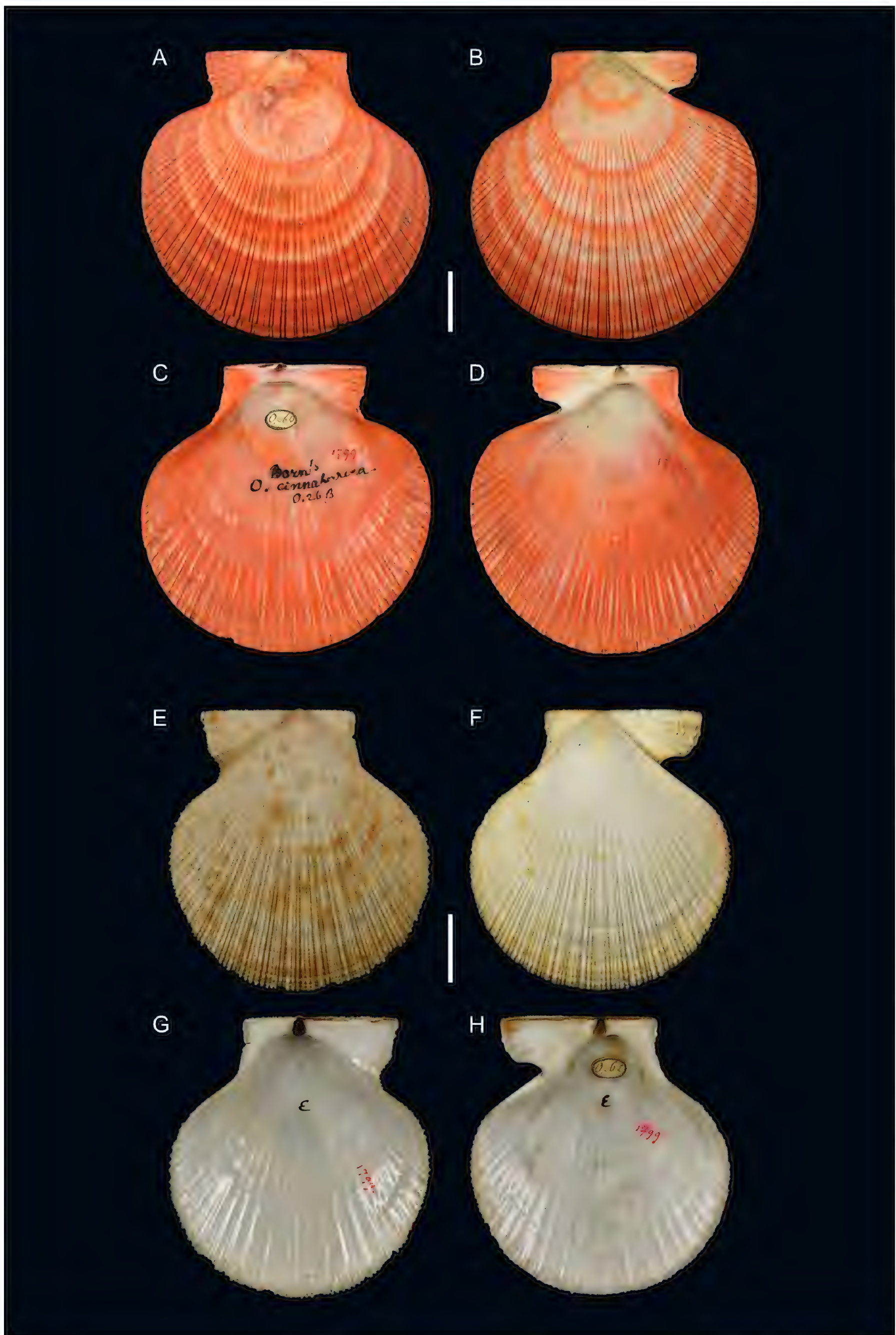


Figure 9. *Ostrea cinnabarina* Born, 1778. Syntypes NHMW-ZOO-MO-14107. **A–D.** Syntype 1: left valve exterior (**A**) and interior (**C**), right valve exterior (**B**) and interior (**D**). **E–H.** Syntype 2: left valve exterior (**E**) and interior (**G**), right valve exterior (**F**) and interior (**H**). Scale bars: 2 cm.

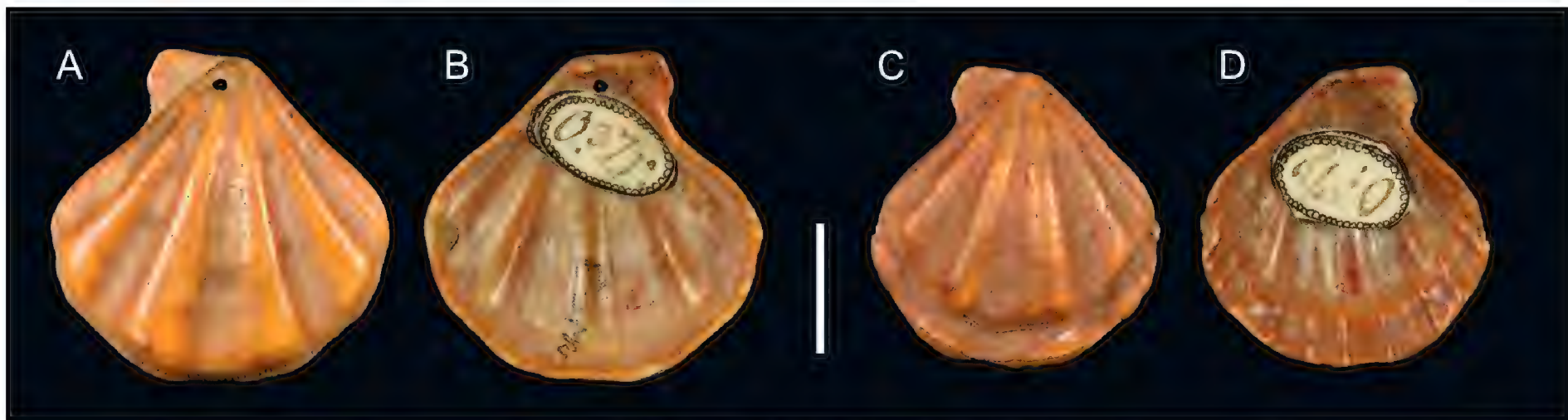


Figure 10. *Ostrea coarctata* Born, 1778. Syntypes NHMW-ZOO-MO-14108, 2 left valves. Syntype 1: left valve exterior (A) and interior (B). Syntype 2: left valve exterior (C) and interior (D). Scale bar: 1 cm.

Original description.

Latin: *Testa convexa glabra, radiis (6) convexis, margine coarctato.*

Valva solitaria.

Testa convexa tenuis glabra, longitudinaliter obsolete striata. Radii (6) convexi crassi. Margo deorsum flexus undique coarctatus; Limbus crenulatus. Auriculae inaequales; hinc distincta ab O. plica.

German: Die bäuchige glatte Schale hat (6) erhabene Strahlen und einen eingefaßten Rand.

Eine einzelne Klappe.

Die bäuchige dünne glatte Schale ist der Länge nach mit matten Streifen versehen. Die (6) Strahlen sind erhaben und dick. Der Rand ist mit einer Stulpe eingefaßt und inwändig gekerbet. Die Ohren sind ungleich, wodurch sich diese Art von dem gewölbten Mantel unterscheidet.

Translation into English: Shell bulging and smooth, with 6 convex ribs and a fringed margin.

Single valve.

The bulging, thin, smooth shell is marked with dull, longitudinal stripes. The six ribs are raised and broad. The margin is curved downwards along its length and

crenulate. The auricles are unequal, distinguishing this species from *Ostrea plica*.

Additional remarks from Born 1780.

– **Size:** Long. 11. lin., lat. 1. poll. [24.1 mm, 26.3 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14108, syntype 1: H: 25.1 mm, L: 25.9 mm. NHMW-ZOO-MO-14108, syntype 2: H: 22.5 mm, L: 22 mm.

Remarks. Despite Born's name having priority over *Ostrea flexuosa* Poli, 1795, this latter name was considered a *nomen protectum* (Dijkstra 2009).

Ostrea elongata Born, 1778

Current name: *Manupecten pesfelis* (Linnaeus, 1758)

Born common names: German: Der Lange Mantel

Fig. 11

Born 1778: p. 86. No figure given.

Born 1780: p. 103. Plate VI, fig. 2.

Type material. Syntype: NHMW-ZOO-MO-14105, 1 left valve.



Figure 11. *Ostrea elongata* Born, 1778. Syntype NHMW-ZOO-MO-14105, 1 left valve: figure from Born (1780), Plate VI, No. 2 (A), left valve exterior (B) and interior (C). Scale bar: 1 cm.

Original description.

Latin: *Testa ovato elongata, longitudinaliter striata, radiis (8) transversim rugosis, auricula altera minima.*

Testa ovata, elongata, planiuscula subpellucida; striae elevatae longitudinales; costae 8. transversim rugosae. Margo repandus plicatus. Auriculae inaequales supra muricatae, altera minima. Color pallide incarnatus.

German: Die eyförmige verlängerte und der Länge nach gestreifte Schale hat (8) in die Quere gerunzelte Strahlen, und ein sehr kleines Ohr.

Die Schale ist eyförmig, verlängert, flach und halb durchsichtig. Nach der Länge laufen erhabene Streifen. Die 8 Ribben sind runzelicht. Der Rand ist ausgeschweift und gefalten. Die ungleichen Ohren, deren eines sehr klein ist, sind oben rauh. Von blasser fleischrother Farbe.

Translation into English: Shell elongated ovate, longitudinally striated, with 8 transversally wrinkled radial ribs, one auricle very small.

The shell is ovate, elongated, flat, and semi-transparent, with raised longitudinal stripes. The eight ribs are wrinkled. The margin is scalloped and folded. The auricles are unequal; one is very small, and both are rough on top. The shell is pale flesh-coloured.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 2. lin., lat. 10. lin. [30.7 mm, 22 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14105: H: 29.2 mm, L: 22.5 mm.

Remarks. The type status of these specimens and further taxonomic issues were discussed by Dijkstra (2009).

***Ostrea miniata* Born, 1778**

Current name: *Talochlamys pusio* (Linnaeus, 1758)

Born common names: German: Der menningrothe Mantel

Fig. 12

Born 1778: p. 88. No figure given.

Born 1780: p. 104. Plate VII, fig. 1.

Type material. Syntypes: NHMW-ZOO-MO-14095, 1 complete specimen; NHMW-ZOO-MO-14096, 1 complete specimen.

Original description.

Latin: *Testa inaequalvi multistriata scabra, auriculis subaequalibus.*

Testa rotundata, striis longitudinalibus numerosis muricatis. Valvae inaequales, altera plana, altera convexa, excrescentiis transversis lamelloso laceris. Auriculae subaequales, altera excisa margine ciliato. Color albus maculis confluentibus miniatis.

German: Die ungleichklappige Schale hat sehr viele rauhe Streife, und beinahe gleiche Ohren

Die rundliche Schale ist der Länge nach mit rauhen Streifen versehen. Die Klappen sind ungleich, deren eine flach, die andere erhaben, und in die Quere mit

krausen Blättern besetzt ist. Die Ohren sind beinahe gleich, eines ausgeschnitten, und am Rande rauh. Die Farbe ist weiß mit zusammenfließenden menningfarbigen Flecken.

Translation into English: The inequivalve shell has many rough radial ribs and almost equal auricles.

The rounded shell has rough longitudinal ribs. The valves are unequal: one is flat, the other convex and adorned with concentric corrugated lamellae. The auricles are nearly equal; one has a notched and rough margin. The colour is white with merging, vermilion spots.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 6. lin., lat. 1. poll. 4. lin. [39.5 mm, 35.1 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14095: H: 37 mm, L: 34.7 mm. NHMW-ZOO-MO-14096: H: 38.1 mm, L: 33.6 mm.

Remarks. The type status of these specimens and further taxonomic issues were discussed by Dijkstra (2009).

***Ostrea pyxidata* Born, 1778**

Current name: *Minnivola pyxidata* (Born, 1778)

Born common names: German: Die gefurchte Dose

Fig. 13

Born 1778: p. 93. No figure given.

Born 1780: p. 108. Plate VI, fig. 5 & 6.

Type material. Syntype: NHMW-ZOO-MO-14110, 1 complete specimen.

Original description.

Latin: *Testa inaequalvi, radiis (32) convexis laevibus. Valva altera plana.*

Testa rotundata, radiis (32) convexis laevibus, Valva una plana, altera convexa, prope auriculam excisam ciliata. Color albus, fusco carneoque variegatus.

German: Die Schale, welche aus einer bäuchigen, und einer flachen Klappe bestehet, hat (32) erhabene glatte Strahlen.

Die rundliche Schale hat (32) erhabene glatte Strahlen. Eine Klappe ist flach, die andere bäuchig und nächst dem ausgeschnittenen Ohre rauh. Weiß mit fleischrothen Flecken.

Translation into English: Inequivalve shell with 32 raised, smooth ribs, one valve convex, the other flat.

The rounded shell has 32 smooth ribs. One valve is flat, the other convex and rough near the notched auricle. The colour is white with flesh-pink spots.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 5. lin., lat. 1. poll. 6. lin. [37.3 mm, 39.5 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14110: H: 38.1 mm, L: 40.2 mm.

Remarks. The type status of these specimens and further taxonomic issues were discussed by Dijkstra (2009).

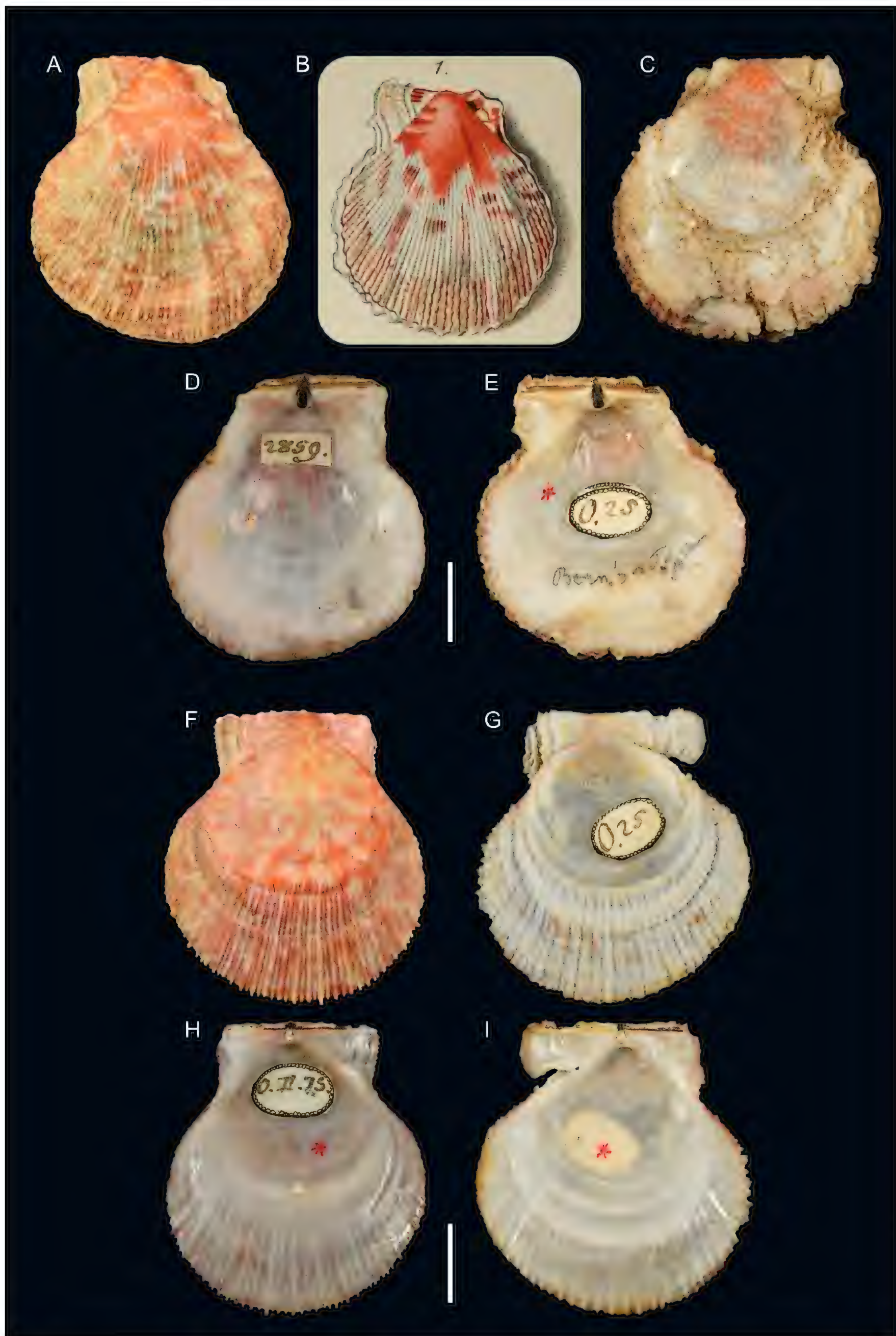


Figure 12. *Ostrea miniata* Born, 1778. **A–E.** Syntype NHMW-ZOO-MO-14095: left valve exterior (**A**) and interior (**D**), right valve exterior (**C**) and interior (**E**), figure from Born (1780), Plate VII, No. 1 (**B**). **F–I.** Syntype NHMW-ZOO-MO-14096: left valve exterior (**F**) and interior (**H**), right valve exterior (**G**) and interior (**I**). Scale bars: 1 cm.



Figure 13. *Ostrea pyxidata* Born, 1778. Syntype NHMW-ZOO-MO-14110. A–C. Left valve: figure from Born (1780), Plate VI, No. 5 (A), exterior (B) and interior (C). D–F. Right valve: figure from Born (1780), Plate VI, No. 6 (D), exterior (E) and interior (F). Scale bar: 1 cm.

***Ostrea sulcata* Born, 1778**

Current name: *Flexopecten glaber* (Linnaeus, 1758)

Born common names: German: Der gefurchte Mantel

Figs 14, 15

Born 1778: p. 86–87. No figure given.

Born 1780: p. 103. Plate VI, fig. 3.

Type material. Lectotype: NHMW-ZOO-MO-14106, 1 complete specimen, designated by Dijkstra (2009). Paralectotypes: NHMW-ZOO-MO-14472, 5 complete specimens and 2 left valves.

Original description.

Latin: *Testa aequivalvi rotundata, longitudinaliter striata, radiis (12), auriculis subaequalibus.*

α albo fuscoque maculata, β tota flava

Testa subpellucida rotundata, convexa, aequivalvis, striis arcuatis longitudinalibus; Costis duodecim radiatis. Auriculae fere aequales latae.

German: Die gleichklappige rundliche Schale ist nach der Länge gestreift, mit (12) strahligen Ribben und einigermaßen ungleichen Ohren versehen.

α Weiß und braun gefleckt, *β* ganz gelb.

Die Schale ist rundlich, bäuchig und halb durchsichtig; die Klappen von gleicher Größe, mit gedrängten nach der

Länge laufenden Streifen besetzt. Die Ohren sind beinahe gleich und breit.

Translation into English: Rounded, equivalve shell with longitudinal stripes, 12 radial ribs and slightly unequal auricles.

α with white and brown spots, *β* entirely yellow.

The shell is rounded, convex, and semi-transparent; the valves are of equal size, covered with dense, longitudinal stripes. With twelve radial ribs. The auricles are broad and almost of equal size.

Additional remarks from Born 1780.

– **Size:** Long. 10. lin., lat. 10. lin. [22 mm, 22 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14106, lectotype: H: 22 mm, L: 23 mm. NHMW-ZOO-MO-14472, paralectotype 1: H: 26.9 mm, L: 27.8 mm. NHMW-ZOO-MO-14472, paralectotype 2: H: 23.9 mm, L: 22.8 mm. NHMW-ZOO-MO-14472, paralectotype 3: H: 21.9 mm, L: 23 mm. NHMW-ZOO-MO-14472, paralectotype 4: H: 27.8 mm, L: 28.6 mm. NHMW-ZOO-MO-14472, paralectotype 5: H: 27.1 mm, L: 28.2 mm. NHMW-ZOO-MO-14472, paralectotype 6: H: 34.5 mm, L: 34.8 mm. NHMW-ZOO-MO-14472, paralectotype 7: H: 25.7 mm, L: 24.7 mm.

Remarks. The type status of these specimens and further taxonomic issues were discussed by Dijkstra (2009).



Figure 14. *Ostrea sulcata* Born, 1778. Lectotype NHMW-ZOO-MO-14106: left valve exterior (A) and interior (B), right valve exterior (C) and interior (D). Scale bar: 1 cm.

Ostrea undata Born, 1778

Current name: *Valochlamys tranquebaria* (Gmelin, 1791)

Born common names: German: Die wellenförmige Tasche

Fig. 16

Born 1778: p. 94. No figure given.

Born 1780: p. 108. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14112, 2 complete specimens; Knorr (1769), Part 2, plate IV, fig. 2–3.

Original description.

Latin: *Testa aequivalvi ovata, radiis (18) convexis, sulcis transversim striatis.*

Valvae solitariae ovatae, radiis (18–20) convexis glabris, striis transversis intercostalibus. Color albus, maculis transversis undatis fuscis.

German: Die gleichklappige Schale hat (18) erhabene Strahlen, mit nach der Quere gestreiften Zwischenfurchen.

Die einzelnen Klappen haben (18–20) erhabene Strahlen, und in die Quere gestreifte Zwischenfurchen. Die Farbe ist weiß mit wellenförmigen braunen Querflecken.

Translation into English: Ovate, equivalve shell with 18 convex radial ribs, grooves transversally striated.

The individual valves are ovate, with 18–20 convex radial ribs and transversally striated grooves in between. Of white colour, with brown, wavy, transversal blotches.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 9. lin., lat. 1. poll. 2. lin. [46.1 mm, 30.7 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14112, syntype 1: H: 32.8 mm, L: 31.5 mm. NHMW-ZOO-MO-14112, syntype 2: H: 34.7 mm, L: 33.5 mm.

Remarks. Born's name would have priority over *Ostrea tranquebaria* Gmelin, 1791, but the latter name was considered a more generally accepted name and thus saved due to its prevailing usage (art. 23.9.1, ICZN, 1999) (Dijkstra 2009).

Brauer (1878) states that the measurements here are “distorted” by a printing error.

Family Limidae Rafinesque, 1815

Ostrea bullata Born, 1778

Current name: *Limatula bullata* (Born, 1778)

Born common names: German: Die Blasentasse

Fig. 17

Born 1778: p. 95. No figure given.

Born 1780: p. 110. Plate VI, fig. 8.

Type material. Syntype: NHMW-ZOO-MO-14113, 1 complete specimen.

Original description.

Latin: *Testa ovata aequivalvi umbonata, sulcis longitudinalibus (32); cardine transverso, auriculis aequalibus.*

Testa oblonga ovata, tumida, sulcis (32) longitudinalibus. Umbones attenuati in apices breves recurvos. Cardo transversus. Lacuna media lata. Auriculae utrinque acutae aequales. Color albus.

German: Die gleichklappige, eyförmige bäuchige Schale hat (32) nach der Länge laufende Furchen, einen schiefen Rand, und gleiche Ohren.

Die eyförmig länglich aufgeblasene Schale hat (32) nach der Länge laufende Furchen. Die Wölbungen verdünnen sich in kurze, rückwärts gekrümmte Spitzen. Das Schloss steht schief Die Höhlung in der Mitte derselben ist breit. Die Ohren sind spizig, und einander gleich. Von weißer Farbe.

Translation into English: The ovate, equivalve and convex shell has 32 longitudinal grooves, a transversal hinge plate and symmetrical auricles.

The elongated, ovate, convex shell has 32 longitudinal grooves. The umbos taper into short, backward-curving beaks. The hinge plate is arranged transversally, with a broad cavity at its centre. The auricles are pointed and symmetrical. The shell is white in colour.

Additional remarks from Born 1780.

– **Common Names:** French: La Lime douce, *Davila*

– **Size:** Long. 1. poll. 3. lin., lat. 10. lin. [32.9 mm, 22 mm]

– **Locality:** Habitat ad Barbados Americae, *Davila*.

New measurements. NHMW-ZOO-MO-14113: H: 34.5 mm, L: 21 mm.



Figure 15. *Ostrea sulcata* Born, 1778. Paralectotypes NHMW-ZOO-MO-14472. **A–D.** Paralectotype 1: left valve exterior (**A**) and interior (**B**), right valve exterior (**C**) and interior (**D**); **E–H.** Paralectotype 2: left valve exterior (**E**) and interior (**F**), right valve exterior (**G**) and interior (**H**); **I–L.** Paralectotype 3, corresponding to Born's colour form β : left valve exterior (**I**) and interior (**J**), right valve exterior (**K**) and interior (**L**); **M–P.** Paralectotype 4: left valve exterior (**M**) and interior (**N**), right valve exterior (**O**) and interior (**P**); **Q–T.** Paralectotype 5: left valve exterior (**Q**) and interior (**R**), right valve exterior (**S**) and interior (**T**); **U, V.** Paralectotype 6, left valve only: exterior (**U**) and interior (**V**); **W, X.** Paralectotype 7, left valve only, exterior (**W**) and interior (**X**). Paralectotypes 5, 6, and 7 (**Q–X**) correspond to Born's colour form α . Scale bars: 1 cm.

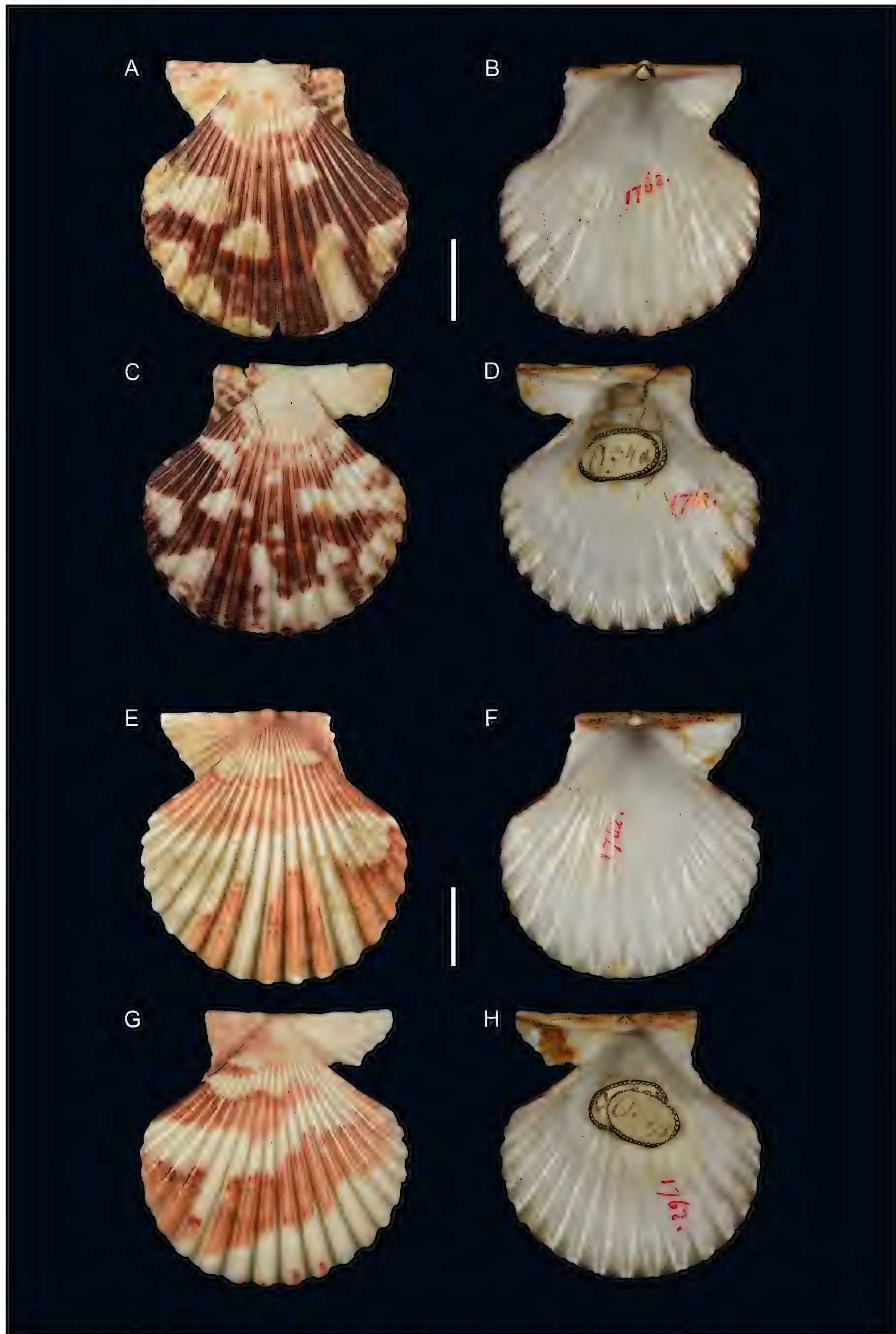


Figure 16. *Ostrea undata* Born, 1778. Syntypes NHMW-ZOO-MO-14112. A–D. Syntype 1: left valve exterior (A) and interior (B), right valve exterior (C) and interior (D). E–H. Syntype 2: left valve exterior (E) and interior (F), right valve exterior (G) and interior (H). Scale bars: 1 cm.

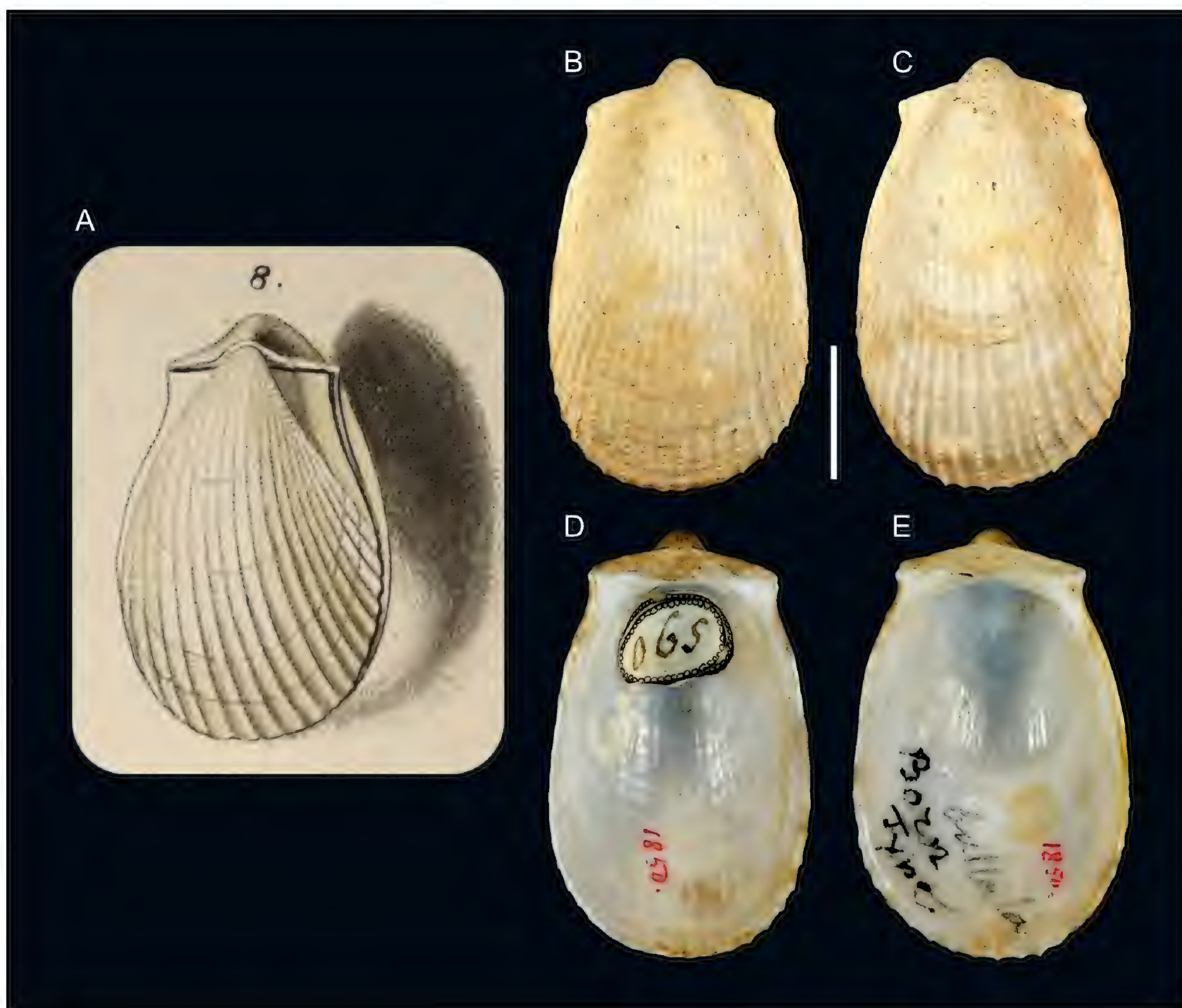


Figure 17. *Ostrea bullata* Born, 1778. Syntype NHMW-ZOO-MO-14113: figure from Born (1780), Plate VI, No. 8 (A), left valve exterior (B) and interior (D), right valve exterior (C) and interior (E). Scale bar: 1 cm.

***Ostrea scabra* Born, 1778**

Current name: *Ctenoides scaber* (Born, 1778)

Born common names: German: Die rauhe Tasche

Fig. 18

Born 1778: p. 96. No figure given.

Born 1780: p. 110–111. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14114, 2 complete specimens; Knorr (1769), Part 6, plate XXXVIII, fig. 5; Lister (1687): fig. 13.

Original description.

Latin: *Testa ovata complanata, striis longitudinalibus deorsum scabris, auriculis inaequalibus, altera emarginata.*

Testa ovata compressa; striae longitudinales numerosae, deorsum ad tactum scabrae. Cardo subobliquus. Auriculae inaequales, minore emarginata, inter quas testa hiat. Color niveus.

German: Die eyförmige zusammengedrückte Schale hat nach der Länge laufende abwärts rauhe Strahlen, und ungleiche Ohren, deren eines eingesäumet ist.

Die eylange, zusammengedrückte Schale ist nach der Länge mit sehr vielen Runzeln besetzt, und hinabwärts rauh anzufühlen. Das Schloß stehet etwas schief. Die Ohren sind ungleich, deren kleineres eingesäumet ist, zwischen welchen die Schale klafft. Von schneeweißer Farbe.

Translation into English: Ovate and flattened shell with numerous longitudinal stripes which feel rough towards the margin. Unequal auricles, one of them bordered.

The ovate, compressed shell is covered with numerous longitudinal wrinkles which feel rough towards the margin. The hinge is slightly slanted. The auricles are unequal, with the smaller one bordered and the shell gaping between them. It is snow-white in colour.

Additional remarks from Born 1780.

- **Common Names:** French: La Lime, *Davila*
- **Size:** Long. 2. poll. 3. lin., lat. 2. poll. 5. lin. [59.3 mm, 63.7 mm]
- **Locality:** Habitat ad Barbados, *Lister*; ad insulam S. Dominici, *Davila*.

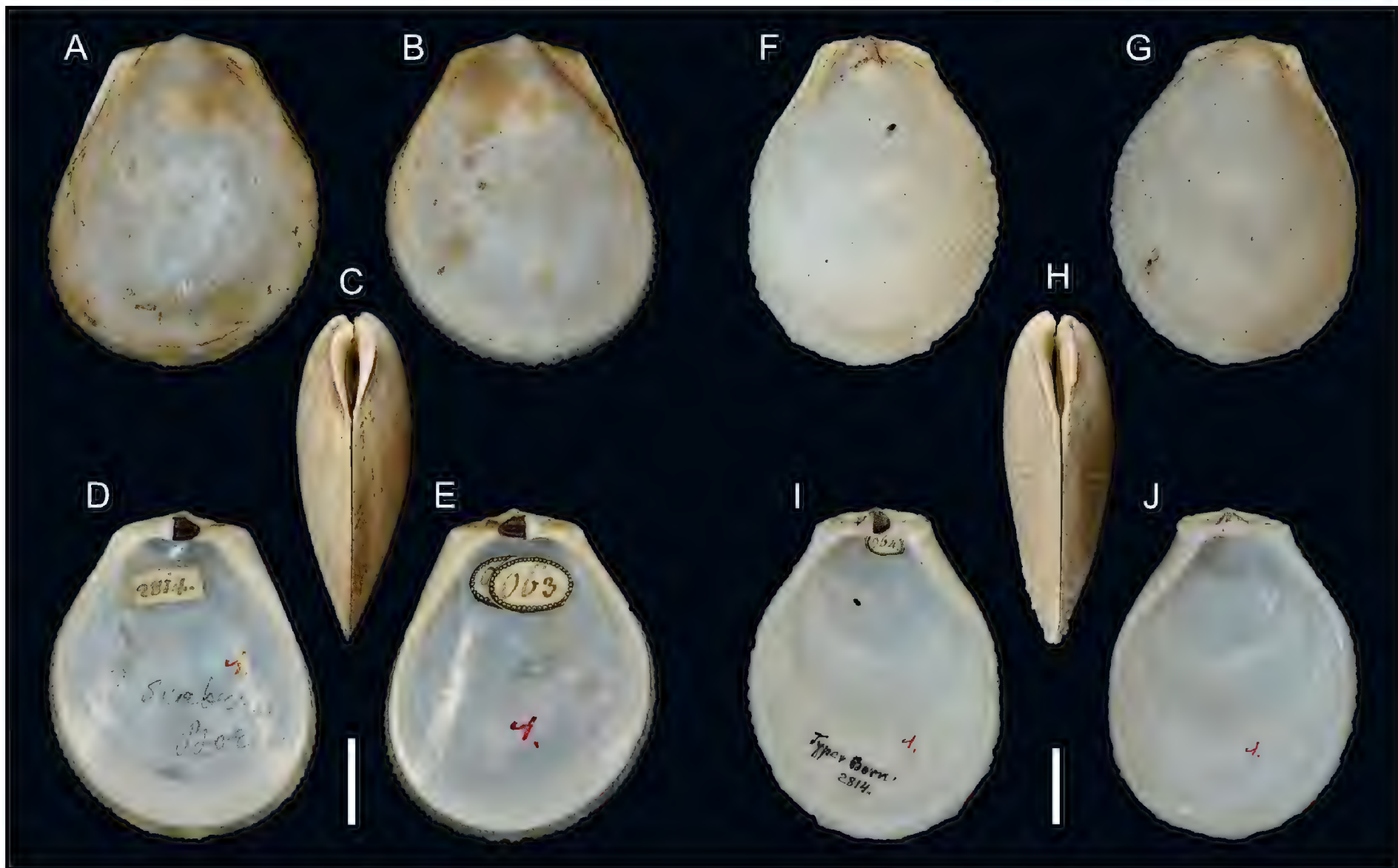


Figure 18. *Ostrea scabra* Born, 1778. Syntypes NHMW-ZOO-MO-14114. A–E. Syntype 1: left valve exterior (A) and exterior (D), right valve exterior (B) and interior (E), frontal view with byssal gape (C); scale bar: 1 cm. F–J. Syntype 2: left valve exterior (F) and exterior (I), right valve exterior (G) and interior (J), frontal view with byssal gape (H); scale bar: 2 cm.

New measurements. NHMW-ZOO-MO-14114, syntype 1: H: 39.2 mm, L: 31.7 mm. NHMW-ZOO-MO-14114, syntype 2: H: 84.8 mm, L: 64.3 mm.

Remarks. The masculine gender of the genus *Ctenoides* was discussed by Bieler and Mikkelsen (2025). The distinction from the closely related *C. mitis* was demonstrated by integrative taxonomy (Dougherty and Li 2017).

Family Carditidae A. Férussac, 1822

Chama phrenitica Born, 1778

Current name: *Beguinia semiorbiculata* (Linnaeus, 1758)

Born common names: German: Die nierenförmige Gienmuschel

Fig. 19

Born 1778: p. 69. No figure given.

Born 1780: p. 83. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14084, 1 complete specimen; Knorr (1769), Part 2, plate XXIII, fig. 7; Valentyn (1773), plate 16, fig. 27.

Original description.

Latin: *Testa reniformi, sulcis longitudinalibus striisque transversis, margine postico serrato, excurrente.*

Testa reniformis, antice lata, rotundata, postice angustata, supra arcuata, infra coarctata; sulci longitudinales, transversim striis decussati. Areae, areolaeque vestigium nullum. Apices subterminales recurvi. Margo anticus com-

planatus, inferior introrsum excavatus, retrorsum in formam lobi excurrentis, limbo crenato. Dentes duo crassi, posticus brevis, anticus elongatus curvatus. Ligamentum validum crassum, ex viridi flavoque resplendens. Color rufus, postice prope apices albus. Cavitas alba, limbo externo fusco.

German: Die nierenförmige nach der Länge gefurchte, und in die Quere gestreifte Schale hat einen rückwärts hervorragenden sägeförmigen Hinterrand.

Die Schale ist nierenförmig, vorne breit und rundlich, hinten schmal, oben bogenförmig erhaben, unten eingedrückt. Die nach der Länge laufenden Furchen sind mit Querstrichen durchgezogen. Weder am Vorder- noch am Hinterrande zeigt sich eine merkliche Fläche. Die Spitzen sind rückwärts gekrümmt, und stehen nahe an dem einen Ende. Der Vorderrand ist flach gedrückt, der untere einwärts ausgehöhlet, und verläuft sich rückwärts in einen lappenförmigen Fortsatz. Der innere Rand ist gekerbt. Am Schloße sind zween starke Zähne, davon der vordere kürzer, der hintere verlängert und gekrümmt ist. Das dicke starke Band hat im Bruche einen grüngelben Glanz. Die Schale ist außen braunroth, hinter den Spitzen weiß. Die Höhlung weiß, am äußeren Rande braun.

Translation into English: The kidney-shaped shell has longitudinal grooves with transversal stripes and a serrated and protruding posterior margin.

The shell is kidney-shaped, broad and rounded at the front, narrow at the back, arched at the top, and compressed at the bottom. The longitudinal grooves are intersected by co-marginal lines. There is no sign of either an escutcheon

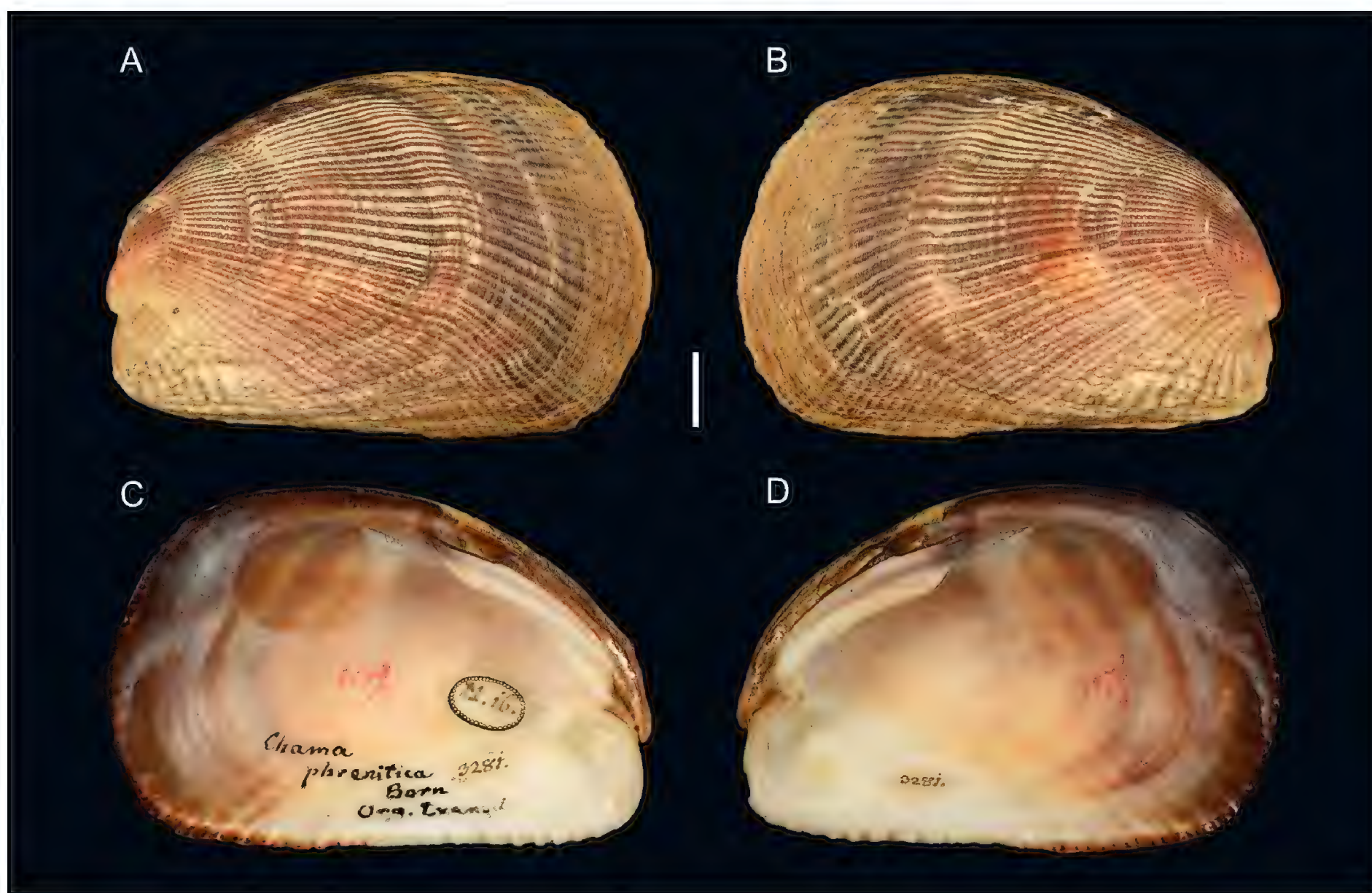


Figure 19. *Chama phrenitica* Born, 1778. Syntype NHMW-ZOO-MO-14084: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). Scale bar: 1 cm.

or a lunule. The beaks are curved backward and positioned close to one end. The anterior margin is flattened, the lower margin concave and posteriorly transitioning into a lobe-shaped extension. The inner margin is crenulate. The hinge has two strong teeth, the anterior one shorter and the rear one elongated and curved. The thick, strong ligament has a greenish-yellow sheen when broken. The external shell surface is reddish-brown and white behind the tips. The inner surface is white with a brown margin.

Additional remarks from Born 1780.

– **Size:** Long. 2. poll. 10. lin., lat. 2. poll. [74.6 mm, 52.7 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14489 (colour form α): H: 50.6 mm, L: 74.7 mm.

Family Cardiidae Lamarck, 1809

***Cardium aeolicum* Born, 1778**

Current name: *Lyrocardium aeolicum* (Born, 1778)

Born common names: German: Die Ost- und Westmuschel

Fig. 20

Born 1778: p. 36. No figure given.

Born 1780: p. 48. No figure given.

Type material. Lectotype, here designated: NHMW-ZOO-MO-14060, 1 complete specimen (see Remarks).

Additional original references. Buonanni (1681), *Classe seconda*: fig. 91; Knorr (1769), Part 5, plate XXVI, fig. 2.

Original description.

Latin: *Testa subovata sulcis tenuibus longitudinalibus, plicisque transversis obtusis postice.*

Testa subovata, umbonata glabra, longitudinaliter sulcata, postice plicis transversis, complanatis, sursum imbricatis. Margo anticus circa ligamentum laevis. Labia retro apices crassa prominentia. Color albo roseoque varius.

German: Die etwas eiförmige Schale ist mit dünnen Furchen nach der Länge, und rückwärts mit stumpfen Querfalten besetzt.

Die Schale ist einigermaßen eiförmig, bäuchig und glatt, nach der Länge gefurcht, und hinten mit platt gedrückten aufwärts ziegelförmig gestellten Falten versehen. Der Vorderrand ist neben dem Rande glatt. Hinter den Spizen ragen dicke Lippen hervor. Die Farbe ist weiß mit Rosenroth vermenget.

Translation into English: Shell ovate with delicate longitudinal ribs and, in the posterior area, flattened transversal folds.

The shell is ovate, bulging, and smooth, furrowed longitudinally: the posterior area features flattened, upwards-pointing transversal folds in a brick-like line-up. The frontal margin is smooth alongside the ligament. Thick lips protrude behind the tips. The colour is white mixed with rose-red.



Figure 20. *Cardium aeolicum* Born, 1778. Lectotype NHMW-ZOO-MO-14060: left valve exterior (A) and interior (C), right valve exterior (B) and interior (C). Scale bar: 1 cm.

Additional remarks from Born 1780.

- **Common Names:** Belgian: Ost en West Doublet.
- **Size:** Long. 2. poll., lat. 1. poll 10. lin. [52.7 mm, 48.3 mm]
- **Locality:** Habitat in mari indico, *Bonanni*; ad littora Sinensia, *Knorr*.

New measurements. NHMW-ZOO-MO-14060: H: 43.1 mm, L: 40.2 mm.

Remarks. This specimen was illustrated by Hylleberg (2004) and ter Poorten (2024), and both considered it a holotype. However, Born based his description also on illustrations by Buonanni (1681) and Knorr (1769) that belong to the type series. In our opinion, these illustrations do not unambiguously identify the species, and the specimens come from India (Buonanni 1681) and possibly China (Knorr 1769, who – while covering specimens illustrated in both his figures 1 and 2 on plate XXVI in the same paragraph – referred to the Chinese origin of the Cardiid in his fig. 1, but the origin of the specimen illustrated in fig. 2 appears unspecified). Born's specimen does not bear locality data,

but *Lyrocardium aeolicum* is reported to occur in tropical West Africa and the Cape Verde archipelago (ter Poorten 2024), suggesting it may be a distinct species from those illustrated by Buonanni and Knorr. To stabilise the nomenclature, we here designate specimen NHMW-ZOO-MO-14060 as lectotype.

Brauer (1878) stated that the dimensions of the specimen are smaller than indicated by Born.

***Cardium flavum* Linnaeus, 1758**

Current name: ***Laevicardium oblongum* (Gmelin, 1791)**

Born common names: German: Das gelbe Herz

Fig. 21

Born 1778: p. 35. No figure given.

Born 1780: p. 47. Plate III, fig. 8, (not 7!).

Type material. Syntype: NHMW-ZOO-MO-14045, 1 complete specimen (syntype of *Cardium oblongum* Gmelin, 1791, see Remarks).

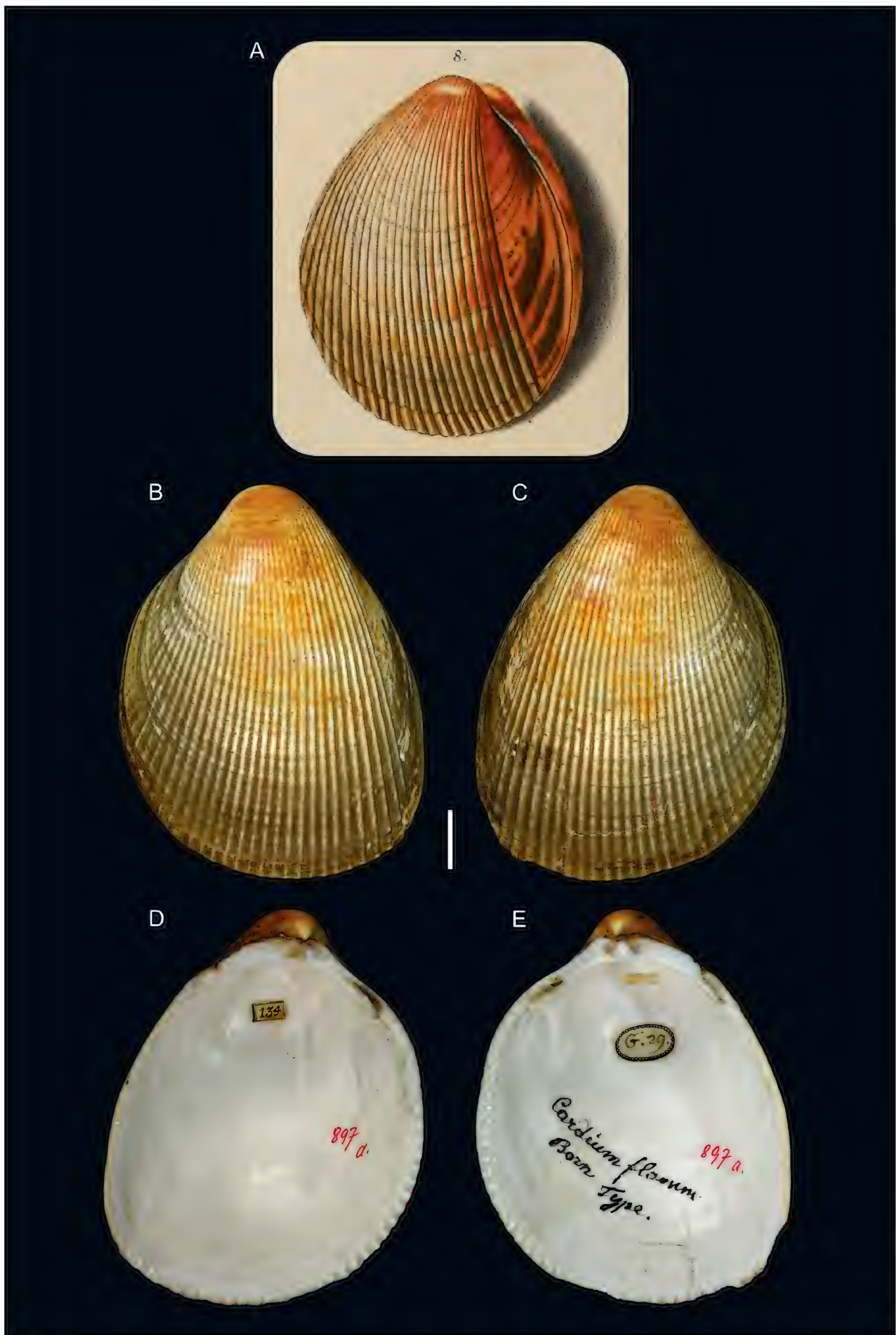


Figure 21. *Cardium flavum* Born, 1778. Syntype NHMW-ZOO-MO-14045: figure from Born (1780), Plate III, No. 8 (A), left valve exterior (B) and interior (D), right valve exterior (C) and interior (E). Scale bar: 1 cm.

Original description.

Latin: *Testa subovata, longitudinaliter obsolete sulcata, margine crenato.*

German: Die fast herzförmige Schale ist nach der Länge schwach gefurchet, und am Rande gekerbt.

Translation into English: Shell subovate, longitudinally weakly furrowed, margin crenulate.

Additional remarks from Born 1780.

- **A more detailed description is given:** *Testa cordata; Valvae ovato-oblongae, ventricosae, longitudinaliter obtuse sulcatae, anticae laeves; Apices incurvati subcontigui; Margo crenatus; Cardo ab adfinibus non differt; Color e rubro luteus.* [The shell is heart-shaped, the valves are ovate-oblong, convex, and longitudinally bluntly grooved, smooth at the front. The apices are curved and almost touch each other. The margin is crenulate. The hinge does not differ from related species. The colour is a reddish-yellow.]
- **Size:** Long. 2. poll. 7. lin, lat. 2. poll. 1. lin. [68 mm, 54.9 mm]
- **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14045: H: 70.8 mm, L: 53.8 mm.

Remarks. This specimen was cited by Gmelin (1791: 3254) in his description of *Cardium oblongum*, being thus its syntype.

In the description of plate III in Born (1780), the illustrations 7–12 are incorrectly numbered and labelled. No. 7 is not *Cardium flavum*, but the interior of No. 6, *C. leucostomum*. No. 8 is not *C. latum* but *C. flavum* (as also mentioned in ter Poorten 2024). No. 9 is not *C. pectiniforme* but *C. latum*. No. 10 is not *Mactra glauca*, but *C. pectiniforme*. No. 11 and 12 are *Mactra glauca*.

***Cardium imbricatum* Born, 1778**

Current name: ***Fragum fragum* (Linnaeus, 1758)**

Born common names: German: Das schuppige Herz

Fig. 22

Born 1778: p. 29–30. No figure given.

Born 1780: p. 42. Plate III, fig. 3 & 4.

Type material. Syntypes: NHMW-ZOO-MO-14035, 1 complete specimen; NHMW-ZOO-MO-14037, 1 complete specimen; Lister (1687), fig. 152; Gualtieri (1742), plate 83, fig. E.

Original description.

Latin: *Testa cordato trilatera, inter sulcos longitudinaliter tenues transverse & dense squamulosa.*

Testa cordata trilateralis. Valvae utrinque angulatae longitudinaliter sulcatae, sulcis tenuibus, inter quos squamulae, undique arcuatae, & dense imbricatae locantur. Margo crenatus, anticus serratus. Color testae niveus, squamularum citrinus.

German: Die herzförmige dreyseitige Schale ist nach der Länge mit feinen Furchen, und dazwischen in die Quere mit dicht aneinander liegenden Schüppchen besetzt.

Die Schale ist herzförmig und dreiseitig. Die Klappen sind an beiden Seiten eckig erhoben, nach der Länge herab laufen linienförmige Furchen, zwischen welchen sich allenthalben bogenförmige gedrängt aneinanderstehende Schüppchen befinden. Der Rand ist gekerbt, vorne sägeförmig. Die Schale ist von schneeweiß, die Schüppchen von zitronengelber Farbe.

Translation into English: The heart-shaped, trilateral shell features narrow longitudinal grooves with densely-packed, transversal scales between them.

The shell is heart-shaped and triangular. The valves are angularly raised on both sides, with longitudinal grooves; between the grooves, all over the valves, there are small, closely packed, arc-shaped scales. The margin is crenulate, at the front serrated. The colour of the shell is white; the scales are lemon-yellow.

Additional remarks from Born 1780.

- **Common Names:** English: The Strawberry heart, *Huddesford*.
- **Size:** Long. 1. poll. 6. lin, lat. 1. poll. 2. lin. [39.5 mm, 30.7 mm]
- **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14035: H: 36.2 mm, L: 25.4 mm. NHMW-ZOO-MO-14037: H: 40.6 mm, L: 30.1 mm.

***Cardium latum* Born, 1778**

Current name: ***Papyridea lata* (Born, 1778)**

Born common names: German: Die breite Herzmuschel; Belgian: Blas-sagtig Hart; French: Coeur enflé.

Fig. 23

Born 1778: p. 37. No figure given.

Born 1780: p. 48. Plate III, fig. 9 (not fig. 8!).

Type material. Lectotype: NHMW-ZOO-MO-14046, 1 complete specimen (designated by Watters (2002)). Paralec-totypes: NHMW-ZOO-MO-14047; 1 complete specimen.

Additional original references. Knorr (1769), Part 6, plate VII, fig. 6.

Original description.

Latin: *Testa lata ovali, longitudinaliter sulcato striata, utrinque scabra, margine antico serrato.*

Testa lata ovalis, longitudinaliter sulcato striata. Costae anticae posticaeque acutae, muricatae, mediae obtusae laeves, interstitiis duplicato striatis. Umbones tenuissime striati, antrorsum subcarinati; Apices incurvi laeves. Cardo, dentibus generis characterem exhibens. Limbus striatus. Margo anticus acute serratus.

α alba, luteo maculata; β alba, rubro maculata.

German: Die breite eyförmige Schale ist nach der Länge gefurchet und gestreift, an beiden Enden rauh, und am Vorderrande sägeförmig.

Die breite eyförmige Schale ist nach der Länge mit Furchen und Streifen besetzt. Die vorderen und hinteren Ribben sind scharf und rauh, die mittleren stumpf und glatt, mit zweyfach gestreiften Zwischenräumen. Die Wölbungen

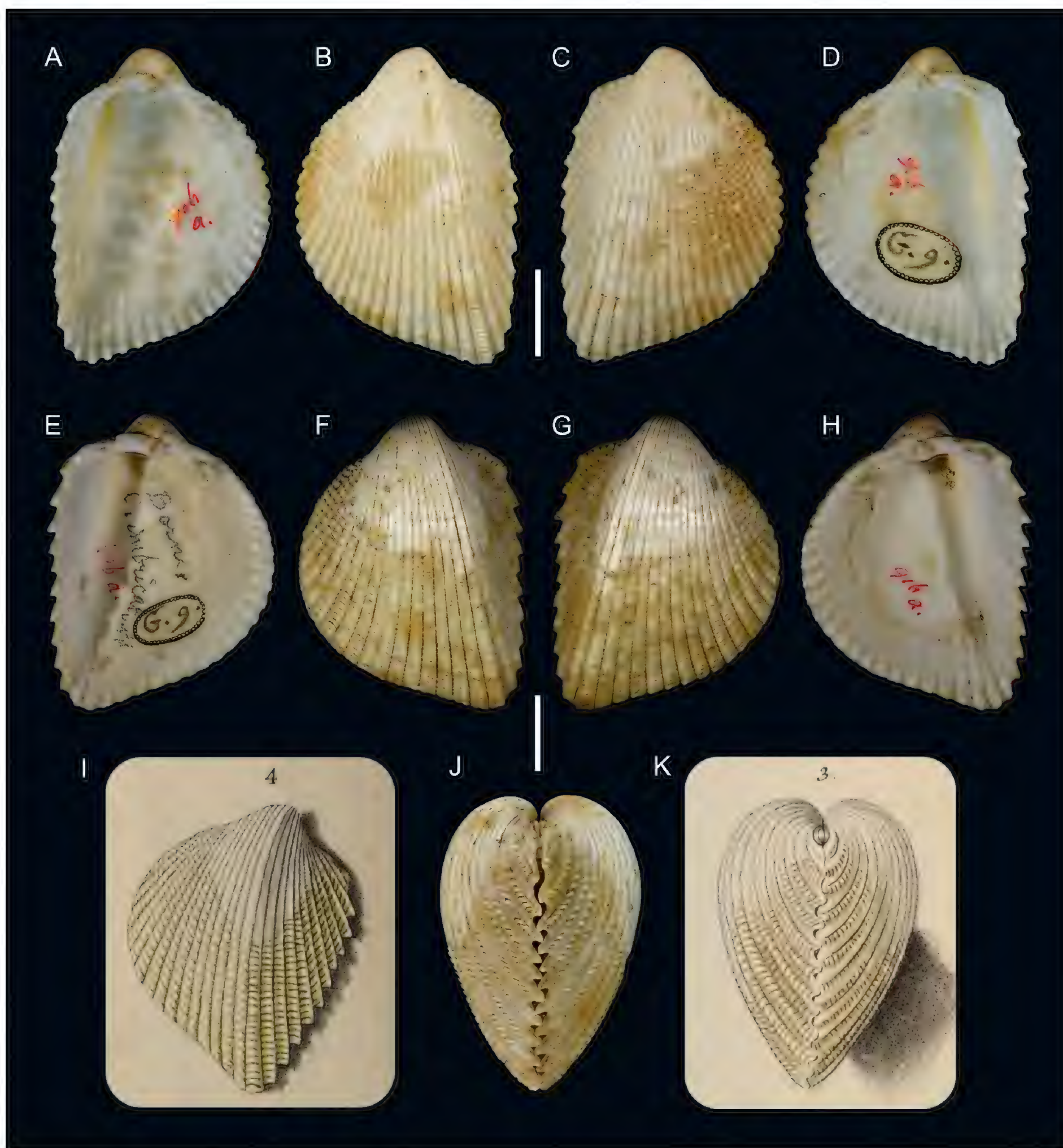


Figure 22. *Cardium imbricatum* Born, 1778. A–D. Syntype NHMW-ZOO-MO-14035: left valve interior (A) and exterior (B), right valve exterior (C) and interior (D). E–H, J. Syntype NHMW-ZOO-MO-14037: left valve interior (E) and exterior (F), right valve exterior (G) and interior (H), back view of articulated specimen (J), figures from Born (1780), Plate III, No. 3 & 4 (I, K). Scale bars: 1 cm.

sind sehr zart gestreift und vorwärts einigermaßen kielförmig. Die Spitzen sind einwärts gekrümmt und glatt. Das Schloss hat an den Zähnen das dem Geschlechte eigenthümliche Kennzeichen. Der innere Rand ist gestreift. Der Vorderrand hat scharfe sägeförmige Ausschnitte.

α weiß und gelb gefleckt; β weiß und rot gefleckt.

Translation into English: Shell broad and oval, with longitudinal grooves and stripes, rough on both sides and serrated at the frontal margin.

The broad, egg-shaped shell features longitudinal grooves and ribs. The anterior and posterior ribs are sharp

and rough, the median ones blunt and smooth, with double-striped interspaces. The umbos are finely striated and somewhat keel-shaped toward the front. The beaks are curved inward and smooth. The hinge displays the teeth pattern characteristic for the genus. The inner margin is striped, and the frontal perimeter has sharp, saw-like notches.

α white with yellow blotches; β white with red blotches.

Additional remarks from Born 1780.

– **More detailed description of colouration:** *Color testae flavescens, limbi aurantius* [The colour of the shell is yellowish, the inner margin orange]

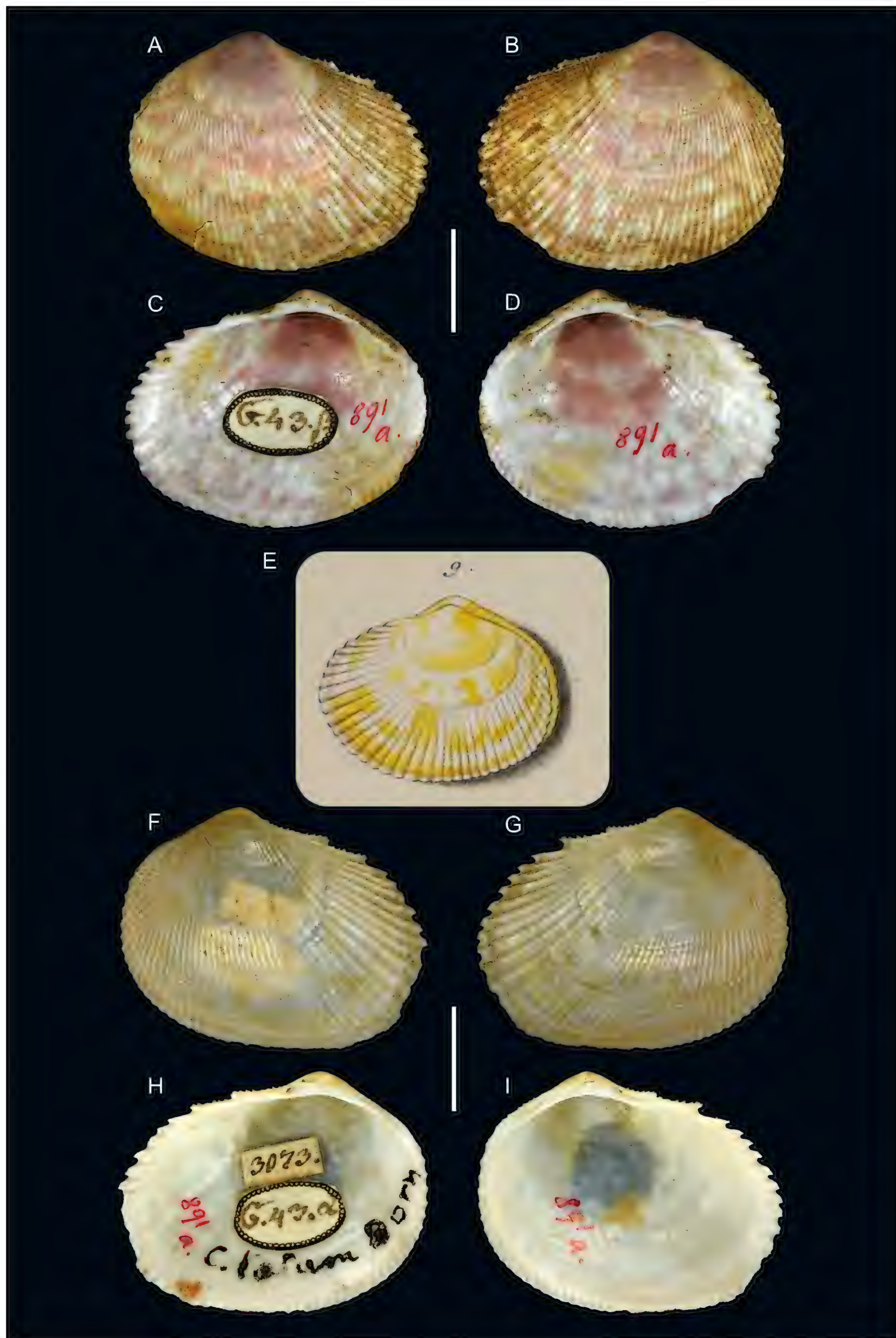


Figure 23. *Cardium latum* Born, 1778. A–D. Lectotype NHMW-ZOO-MO-14046, corresponding to Born's colour form β: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). E–I. Paralectotype NHMW-ZOO-MO-14047, corresponding to Born's colour form α: figure from Born (1780), Plate III, No. 9 (E), left valve exterior (F) and interior (H), right valve exterior (G) and interior (I). Scale bars: 1 cm.

- **Size:** Long. 1. poll. 2. lin, lat. 10. lin. [30.7 mm, 22 mm]
- **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14046, lectotype: H: 23.1 mm, L: 28.7 mm. NHMW-ZOO-MO-14047, paralectotype: H: 23.1 mm, L: 30.3 mm.

Remarks. Measurements given in Born (1780) apparently confuse shell height and length but otherwise correspond well with the size of paralectotype NHMW-ZOO-MO-14047. Illustrations on Plate III in Born (1780) are in part incorrectly labelled (see remarks to *C. flavum*). *C. latum* corresponds to fig. 9, not fig. 8 (as also mentioned by Brauer 1878).

The type material was previously illustrated by Waters (2002) and ter Poorten (2024).

***Cardium leucostomum* Born, 1778**

Current name: ***Acrosterigma magnum* (Linnaeus, 1758)**

Born common names: German: Das gelbmündige Herz

Fig. 24

Born 1778: p. 34–35. No figure given.

Born 1780: p. 46–47. Plate III, fig. 6.

Type material. Syntypes: NHMW-ZOO-MO-14044, 1 complete specimen (Neotype of *Cardium magnum* Linnaeus, 1758, see Remarks); Lister (1687), fig. 168.

Original description.

Latin: *Testa subovata sulcata, costis anticis muricatis, posticis transversim crenatis, areola lanceolata.*

Testa subovata, crassa, sulcis 33. longitudinalibus. Costae compressae angulatae, posticae muricatae, anticae squamulis dense imbricatae; sulci intermedii transversim striati. Margo crenatus, antice ferratus. Areola plana lanceolata, qua ab adfinibus differt. Limbus aurantii coloris.

German: Die etwas eyförmige gefurchte Schale ist an den Vorderribben rauh, an den Hinterribben nach der Quere gekerbet, ihre Hinterfläche ist eyförmig.

Die Schale ist dick, einigermaßen herzförmig, mit 33 nach der Länge laufenden Furchen besetzt. Die Ribben sind etwas flach gedrückt und eckig; die hinten stehenden sind rauh, die vordern mit ziegelförmigen Schüppchen dicht besetzt. Die Zwischenfurchen sind in die Quere gestreift. Der Rand ist gekerbet, vorne sägeförmig. Die Hinterfläche ist platt und lanzetförmig, wodurch sie sich besonders unterscheidet. Der innere Rand ist pomeranzenfarbig.

Translation into English: Shell nearly ovate and furrowed, the anterior ribs rough, the posterior ones transversally crenulate, the escutcheon lanceolate.

The shell is thick, somewhat egg-shaped, with 33 longitudinal grooves. The ribs are slightly flattened and angular, the posterior ones rough, the anterior ones densely covered with brick-like scales. The intermediate grooves are transversally striated. The margin is crenulate, serrated at the front [again, rather at the posterior end!]. The escutcheon is flat and lanceolate, which is a distinctive feature. The inner margin is orange-coloured.

Additional remarks from Born 1780.

- **More detailed description of colouration:** *Color testae flavescens, limbi aurantius* [The colour of the shell is yellowish, the inner margin orange]
- **Size:** Long. 2. poll. 5. lin, lat. 1. poll 11. lin. [63.7 mm, 50.5 mm]
- **Locality:** Habitat ad Jamaicam, Lister.

New measurements. NHMW-ZOO-MO-14044: H: 64.4 mm, L: 51.2 mm.

Remarks. Voskuil and Onverwagt (1991: 66) named the specimen in NHMW ‘holotype’. For works published before 1991, this statement would have been equivalent to a lectotype designation only “*when it has been accepted that a nominal species-group taxon was based on a single specimen and the original description neither implies nor requires that there were syntypes*” (ICZN 1999, art. 74.6). However, Born (1778) also listed Lister’s illustration in the reference material. Lister’s illustrated specimen is a syntype. Therefore, Voskuil and Onverwagt’s indication of ‘holotype’ cannot be considered a valid lectotype designation as erroneously reported by later authors (Vidal 1999; ter Poorten 2024). Specimen NHMW-ZOO-MO-14044 was designated as a neotype of *Cardium magnum* Linnaeus, 1758, by Vidal (1999).

***Cardium magnum sensu* Born, 1778**

Current name: ***Dinocardium robustum* ([Lightfoot], 1786)**

Born common names: German: Die große Herzmuschel

Fig. 25

Born 1778: p. 34. No figure given.

Born 1780: p. 46. Plate III, fig. 5.

Type material. Syntype: NHMW-ZOO-MO-14043, 1 complete specimen; Lister (1687), fig. 168.

Original description.

Latin: *Testa subcordata ventricosa sulcata, costis angulatis posticis transverse, striatis.*

German: Die etwas herzförmige und gefurchte Schale hat eckige Ribben, deren hintere mit nach der Quere laufenden Streifen besetzt sind.

Translation into English: The somewhat heart-shaped and furrowed shell has angular ribs, the posterior ones with transversal stripes.

Additional remarks from Born 1780.

- **A more detailed description is given:** *Testa cordata; Valvae longitudinaliter sulcatae, costis 35. obtusis, posticis retrorsum crenatis; Margo dentatus, anticus crenatus; Cardo idem congeneribus; Cavitas sulcata; color extus rufus.* [The shell is heart-shaped; the valves are longitudinally grooved, with 35 obtuse ribs, the posterior ones crenated backward. The margin is dentate, the anterior part crenated. Same hinge as in related species. The interior surface is grooved. Of reddish colour.]
- **Size:** Long. 3. poll. 9. lin., lat. 3. poll. 5. lin. [98.8 mm, 90 mm]
- **Locality:** Habitat ad Jamaicam, Linnaeus.

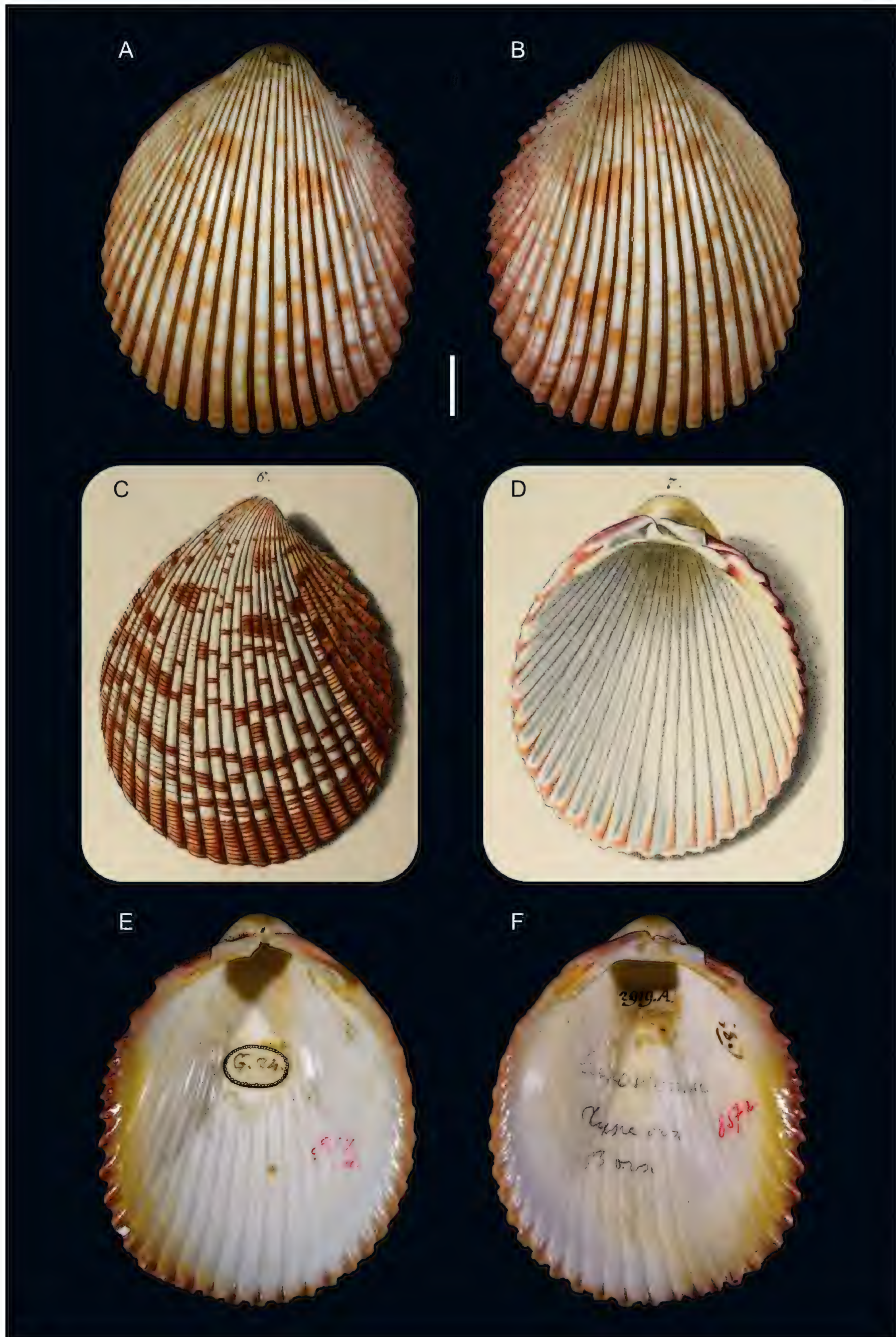


Figure 24. *Cardium leucostomum* Born, 1778. A–F. Syntype (and Neotype of *Cardium magnum* Linnaeus 1758) NHMW-ZOO-MO-14044: left valve exterior (A) and interior (E), right valve exterior (B) and interior (F), figures from Born (1780), Plate III, No. 6 & 7 (C, D). Scale bar: 1 cm.

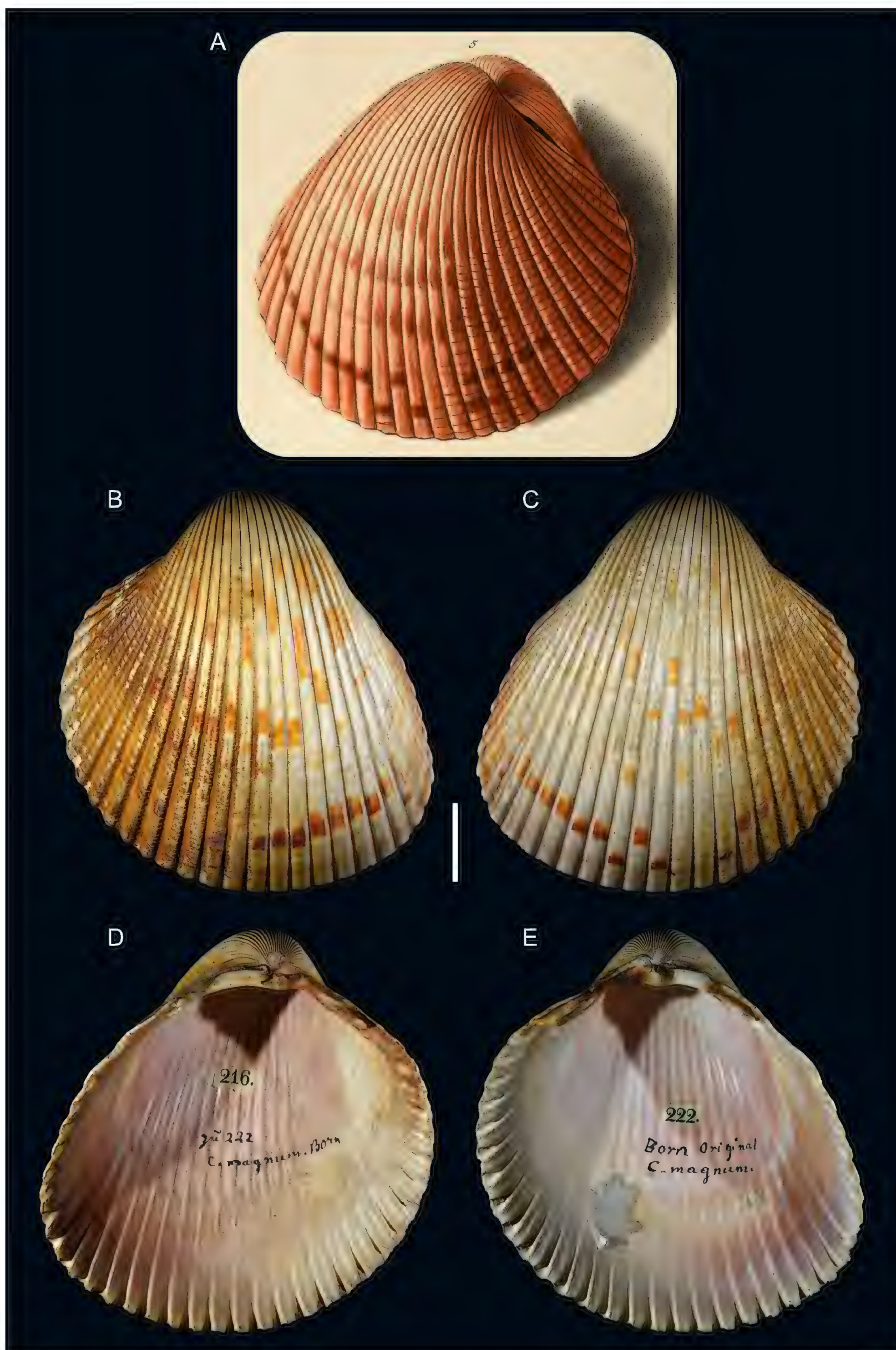


Figure 25. *Cardium magnum* Born, 1778. Syntype NHMW-ZOO-MO-14043: figure from Born (1780), Plate III, No. 5 (A), left valve exterior (B) and interior (D), right valve exterior (C) and interior (E). Scale bar: 2 cm.

New measurements. NHMW-ZOO-MO-14043: H: 102.8 mm, L: 97.8 mm.

Remarks. The binomen “*Cardium magnum* Born, 1780” is widespread in the literature. Dall (1900: 1074)

selected it as the type species of the genus *Dinocardium*, Clench and Smith (1944: 9–10) mentioned it as a junior homonym of *Cardium magnum* Linnaeus, 1758, under *Dinocardium robustum* ([Lightfoot], 1786) in their revision

of Western Atlantic Cardiidae, and ter Poorten (2024) listed it accordingly in his excellent recent monograph on worldwide Cardiidae, where the specimen illustrated in figure 5 on plate 3 in Born (1780) was mentioned as the type specimen of *D. robustum*, and this figure fits very well with the specimen in the collection in Vienna (Fig. 25).

In our opinion, however, the name “*Cardium magnum* Born, 1780” is unavailable because it was not Born’s intention to introduce it, nor can it be considered an ‘indication’ *sensu* art. 12.2 of the ICZN Code. Born (1778: 34) mentioned *Cardium magnum* with a reference to Linnaeus’ *Systema Naturae* of 1767 (page 113, no. 86). He was thus just merely mentioning the occurrence of Linnaeus’ species in the imperial collection. The presence of a question mark at the end of the bibliographic reference possibly implies he was unsure of conspecificity (comparable to the modern “cf” for *confer*, compare (Sigovini et al. 2016), but still not that he introduced this name. Indeed, when Born introduced new names, he first gave the description and then listed the occurrence of specimens in the collection and/or bibliographic references. In contrast, when Born listed a species already described in previous works, he first listed the bibliographic reference and then provided a brief re-description. This is the case also for *Cardium magnum*.

As “*Cardium magnum* Born, 1780” is unavailable, the type species selection for genus *Dinocardium* is not valid because “In the meaning of the Code the “originally included nominal species” comprise only those included in the newly established nominal genus or subgenus, having been cited in the original publication by an available name” (art. 67.2.1, ICZN Code). When Dall introduced the genus *Dinocardium*, he fixed as the type species “*Cardium magnum* Born, = *C. ventricosum* Brug.”. Indeed, Bruguière (1789) mentioned the *Cardium magnum* illustrated by Born (1780: “tab. 3 fig. 5”) and a specimen figured by Lister (1687: fig. 165). Therefore, the specimen in the NHMW collection under the name *Cardium magnum* is a syntype of Bruguière’s species. Being *Cardium ventricosum* Bruguière, 1789, an available name, it is here fixed as the type species of the genus *Dinocardium* Dall, 1900.

***Cardium pectiniforme* Born, 1780**

Current name: ***Vasticardium pectiniforme* (Born, 1780)**

Born common names: German: Die kamähnliche Herzmuschel

Fig. 26

Born 1778: p. 37–38. No figure given.

Born 1780: p. 49. Plate III, fig. 10 (not 9!).

Type material. Lectotype (designated by Vidal (1997)): NHMW-ZOO-MO-14048, 1 complete specimen. Paralectotype: NHMW-ZOO-MO-14049, 1 complete specimen.

Original description.

Latin: *Testa rotundata complanata, costis triangulis, lateribus muricatis.*

Testa suborbiculata, profunde sulcata; Costae triangularae, transversim crenatae, quarum extimae squamulis

fornicatis scabrae sunt; Margo crenatus, anticus serratus. Superficies externa albida, maculis dispersis fuscis; Cavitas alba, longitudinaliter sulcata.

German: Die rundliche etwas flach gedrückte Muschel hat dreyeckige Ribben, und rauhe Seiten.

Die Schale ist einigermaßen scheibenrund, tiefgefurchet. Die Ribben sind dreyeckig in die Quere gekerbet, die äußern davon sind durch hohle Schüppchen rauh. Der Rand ist gekerbet, vorne sägeförmig. Die äußere Fläche ist weiß mit zerstreuten braunen Flecken. Die innere Höhlung aber ganz weiß und nach der Länge gefurchet.

Translation into English: The rounded, slightly compressed shell has triangular ribs and is rough close to the anterior and posterior margins.

The shell is almost disc-shaped and deeply furrowed. The ribs are triangular and notched, the external ones roughened by arched scales. The margin is notched, serrated at the anterior end. The outer surface is white with scattered brown spots; the inner cavity is entirely white and furrowed longitudinally.

Additional remarks from Born 1780.

- **Size:** Long. 1. poll., lat. 9. lin. [26.3 mm, 19.8 mm]
- **Locality:** Habitat in Indiis.
- **Additional notes:** *A Cardio pectinato Linaei penitus distincta* [strongly differing from *Cardium pectinatum* Linnaeus].

New measurements. NHMW-ZOO-MO-14048, lectotype: H: 26.5 mm, L: 25.8 mm. NHMW-ZOO-MO-14048, paralectotype: H: 30.6 mm, L: 29 mm.

Remarks. This species was introduced for the first time under the name *Cardium pectinatum* by Born (1778). In 1780, he reported it again as *Cardium pectiniforme* with an identical description and pointed at his 1778 work. Based on his note in the 1780 edition (“strongly differing from *Cardium pectinatum* Linnaeus”), we assume that he realised between the two editions that the name *Cardium pectinatum* was already occupied by *Cardium pectinatum* Linnaeus, 1758 (= *Ctena eburnea* (Gmelin, 1791), Lucinidae) and thus introduced the new name *C. pectiniforme*.

Family Mactridae Lamarck, 1809

***Macra glauca* Born, 1778**

Current name: ***Macra glauca* Born, 1778**

Born common names: German: Die fahle Korbmuschel

Fig. 27

Born 1778: p. 40. No figure given.

Born 1780: p. 51. Plate III, fig. 11 & 12.

Type material. Holotype fixed by monotypy: NHMW-ZOO-MO-14051, 1 left valve.

Original description in Born 1778.

Latin: *Testa subovata umbonata, apicibus laevissimis, lateribus undique striatis.*

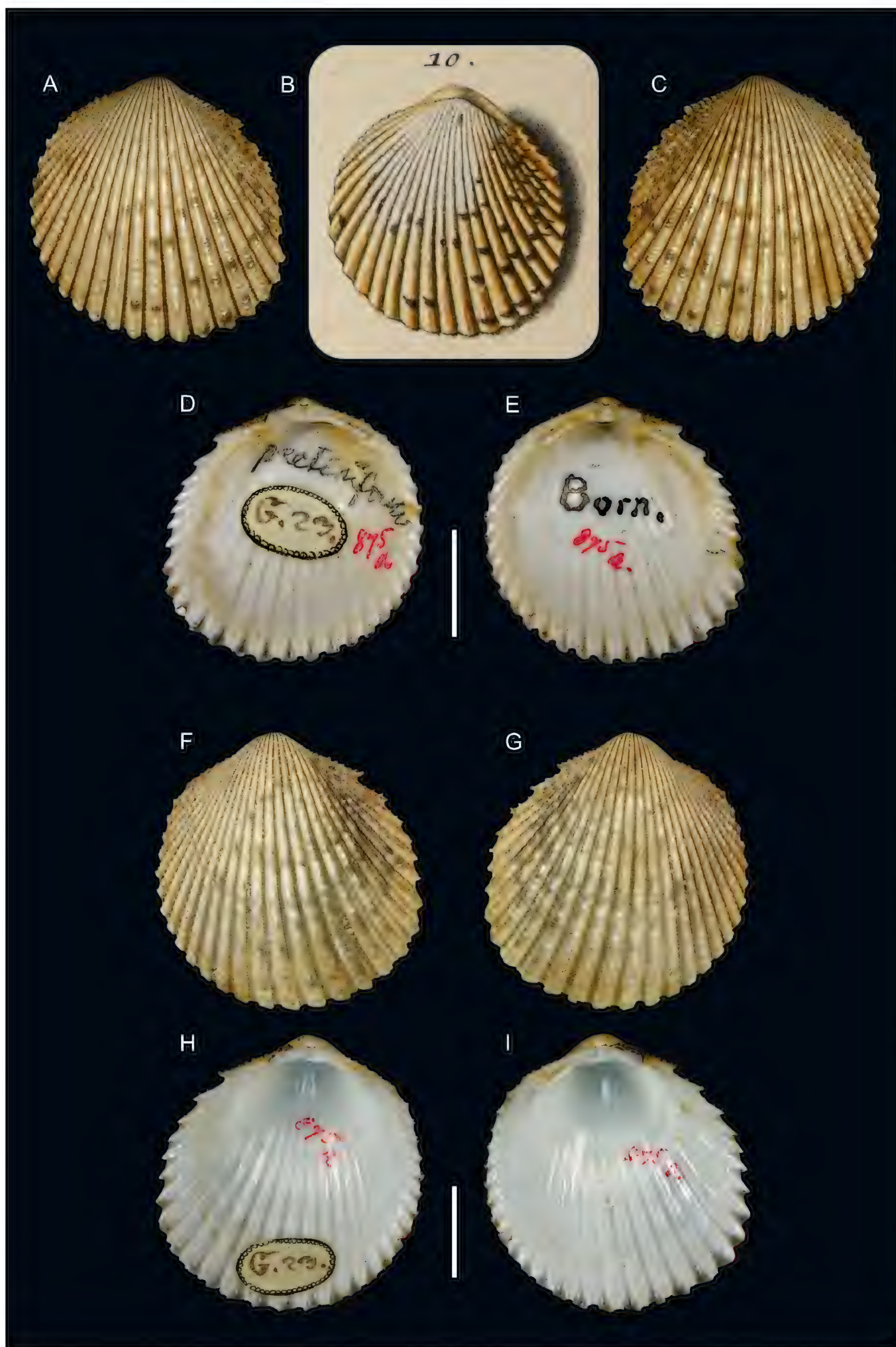


Figure 26. *Cardium pectiniforme* Born, 1780. A–E. Lectotype NHMW-ZOO-MO-14048: left valve exterior (A) and interior (D), right valve exterior (C) and interior (E), figure from Born (1780), Plate III, No. 10 (B). F–I. Paralectotype NHMW-ZOO-MO-14049: left valve exterior (F) and interior (H), right valve exterior (G) and interior (I). Scale bars: 1 cm.

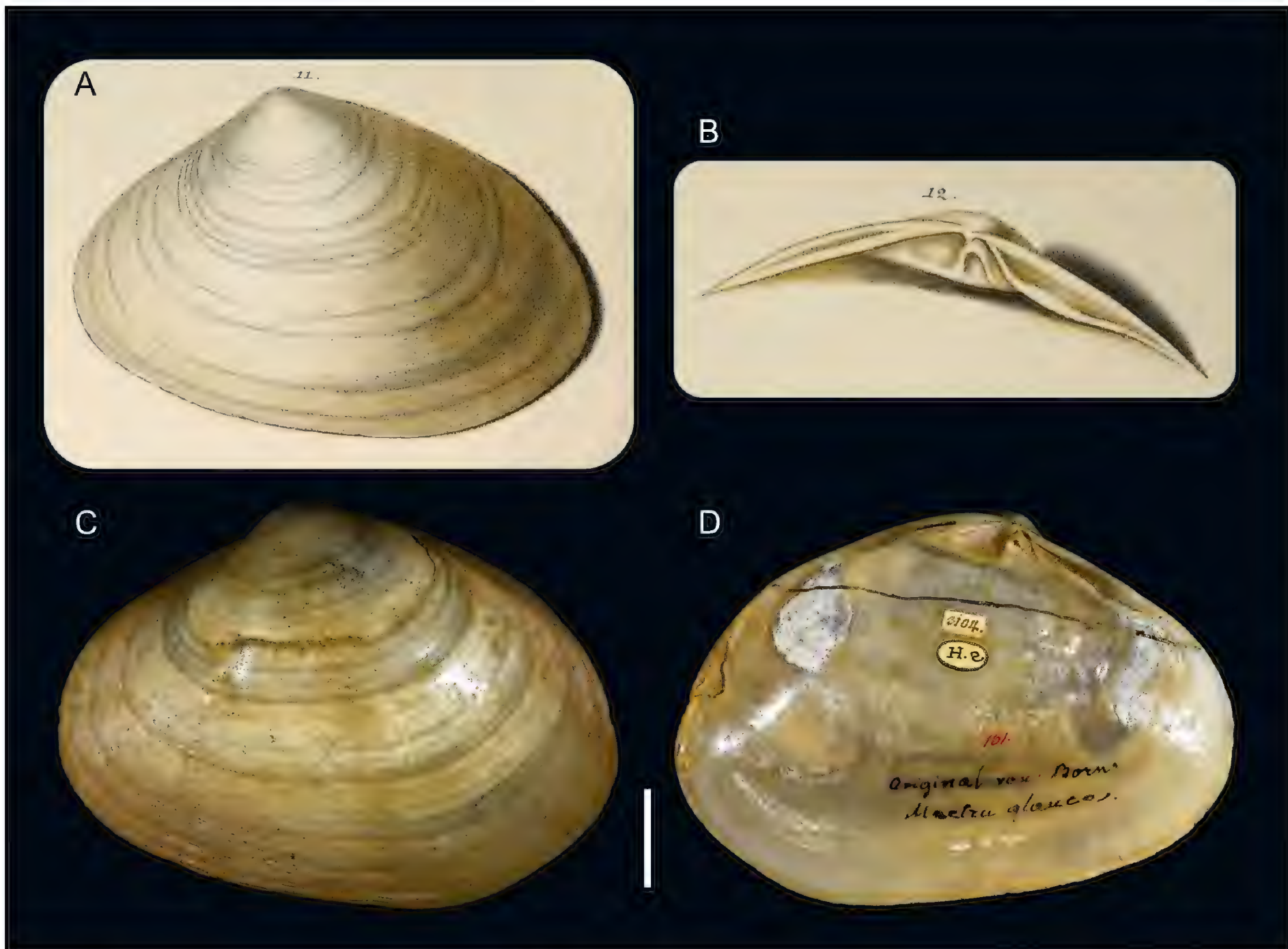


Figure 27. *Mactra glauca* Born, 1778. Holotype NHMW-ZOO-MO-14051, left valve only: figures from Plate III, No. 11 & 12 (A, B), left valve exterior (C) and interior (D). Scale bar: 2 cm.

Testa subovata, tenuis, convexa, apicibus glabris. Area, areolaque indistincta, tenuiter striata. Valvae solitariae dens primarius complicatus, laterales elongati. Color sordide albidus.

German: Die eiförmige bäuchige Schale ist an den Spitzen glatt, und an den Seiten allenthalben gestreift.

Die eiförmige Schale ist dünn, bauchig, gegen die Spitzen zu glatt. Die Vorder- und Hinterflächen sind undeutlich und gestreift. Der Hauptzahn der einzelnen Klappe ist zusammen gelegt, die Seitenzähne lang auslaufend. Die Farbe schmutzig weiß.

Translation into English: The oval and bulging shell has very smooth umbos and is striated throughout on its sides.

The egg-shaped shell is thin, convex, and smooth toward the tips. Lunule and escutcheon are indistinct and faintly striped. The main tooth of the single valve is folded; the lateral teeth are elongated. The colour is a dull white.

Additional remarks from Born 1780.

- **Size:** Long. 3 poll., lat. 4. poll. 4 lin. [79 mm, 114.1 mm]
- **Locality:** Patria ignota.
- **Additional notes:** *Valva solitaria* [single valve].

New measurements. NHMW-ZOO-MO-14051: H: 76.8 mm, L: 111.9 mm.

Remarks. The type specimen is a single left valve whose shape looks more compressed with a flatter ventral margin than most specimens currently attributed to this species. However, the type specimen has a clear scar along its ventral margin at circa one-third of shell height from the umbo, followed by extensive regrowth that followed the new broken profile, giving the valve its compressed appearance. The occurrence of a single valve was mentioned by Born (1778) (“*valva solitaria*”), suggesting this is the only specimen he could inspect at the time of description and is thus the holotype fixed by monotypy.

Family Tellinidae Blainville, 1814

***Tellina punicea* Born, 1778**

Current name: *Eurytellina punicea* (Born, 1778)

Born common names: German: Die dunkelrothe Tellmuschel

Fig. 28

Born 1778: p. 22. No figure given.

Born 1780: p. 33. Plate II, fig. 8.

Type material. Syntype: NHMW-ZOO-MO-14021, 1 complete specimen.

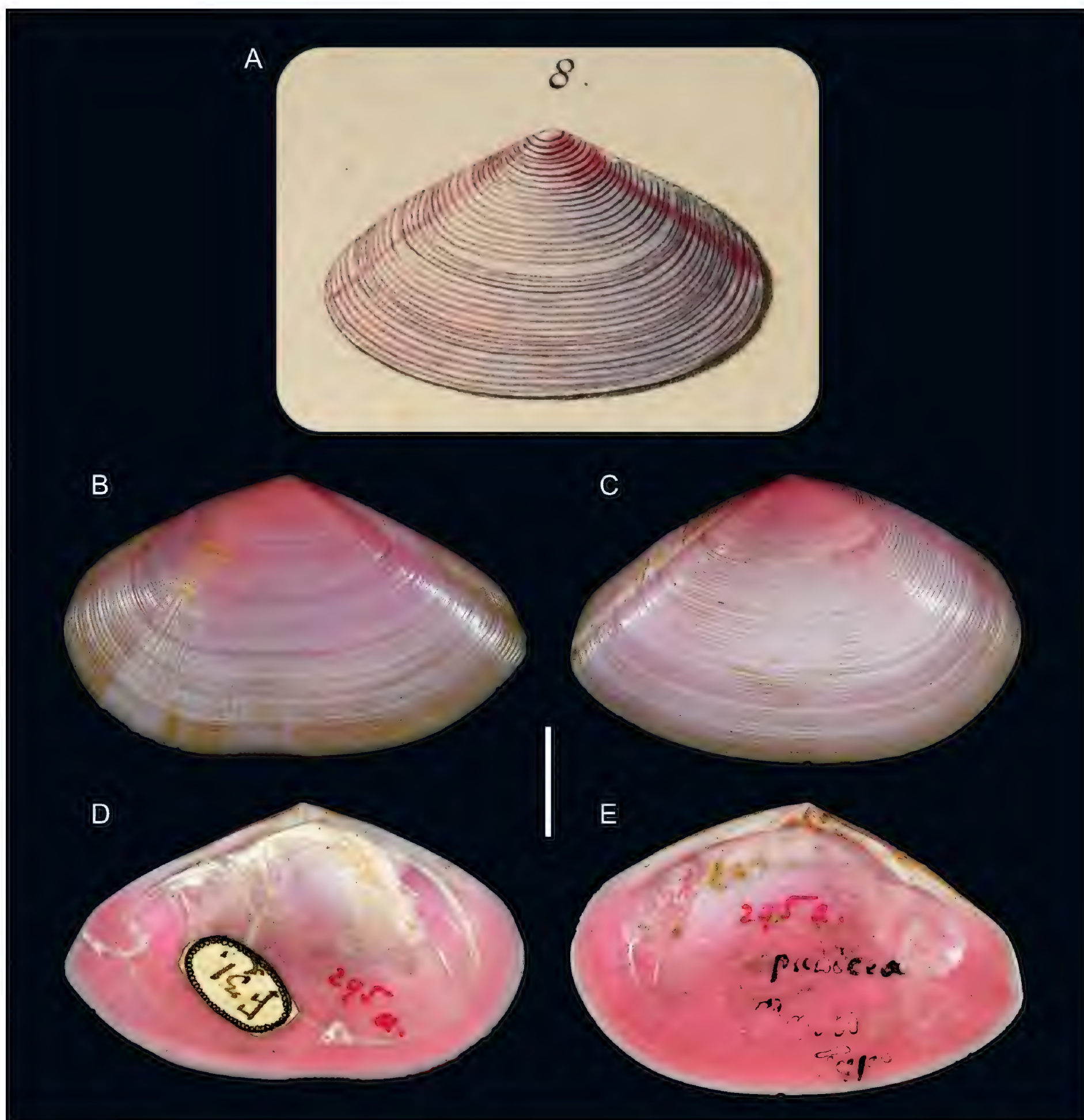


Figure 28. *Tellina punicea* Born, 1778. Syntype NHMW-ZOO-MO-14021: figure from Born (1780), Plate II, No. 8 (A), left valve exterior (B) and interior (D), right valve exterior (C) and interior (E). Scale bar: 1 cm.

Original description.

Latin: *Testa lata ovali, sub aequilatera, glabra, striis transversis approximatis.*

Testa ovalis lata complanata, lateribus utrinque subaequalibus. Apices tenues breves. Labia tecta, Dentes primarii, & laterales secundum characterem generis. Color pallide incarnatus, prope apices & in superficie interna puniceus.

German: Die breite eyförmige glänzende Schale ist beinahe gleichseitig, und mit gedrängt aneinander stehenden Querstreifen überzogen.

Die Schale ist breit, eyförmig und platgedrückt, an den Seiten beinahe gleichlang. Die Spizen sind kurz und fein. Die Lippen bedeckt. Die Hauptzähne haben wie die Seitenzähne das gemeine Merkmal dieses Geschlechtes. Die

Farbe ist an der Oberfläche fleischroth, an den Spizen und inwendig dunkelroth.

Translation into English: Shell broad and egg-shaped, almost equilateral, smooth, with dense co-marginal stripes.

The shell is broad, egg-shaped, and flattened, nearly equilateral. The beaks are short and delicate. The lips are covered. Cardinal and lateral teeth bear the common characteristics of this genus. The surface is flesh-pink; the umbos and the interior are deep red.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll., lat. 1. poll. 8. lin. [26.3 mm, 43.9 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14021: H: 25.7 mm, L: 42.3 mm.

***Tellina rugosa* Born, 1778**Current name: ***Quidnipagus palatam* Iredale, 1929**

Born common names: German: Die runzelichte Tellmuschel

Fig. 29

Born 1778: p. 18. No figure given.

Born 1780: p. 29. Plate II, fig. 3 & 4.

Type material. Syntypes: NHMW-ZOO-MO-14017, 1 complete specimen; NHMW-ZOO-MO-14023, 1 complete specimen.

Original description.

Latin: *Testa subovata lata, rugis membranaceis transversis, rima hiante.*

Testa lata, subovata, scabra, membranis elevatis rugosis transversis. Rima hians. Labra prominula. Apices acuti contingui, antrorsum recurvi. Ligamentum investiens labra, alterumque retro apices tenuius. Color totius testae albus.

German: Die etwas eyförmige breite Schale hat häutige nach der Quere laufende Runzeln, und eine klafende Spalte.

Die Schale ist breit, etwas eyförmig, und durch querlaufende erhabene dünne Runzeln rauh. Die Spalte klafet. Die Lippen ragen hervor. Die Spizen sind dünn, vorwärts gekrümmt, und berühren einander. Die Lippen werden von dem Rande bedeckt, eine anderes dünneres Band läßt sich hinter den Spizen wahrnehmen. Die Farbe der ganzen Schale ist weiß.

Translation into English: Shell broad and subovate, with membranaceous co-marginal wrinkles and gaping valves.

The shell is broad, almost ovate, and roughened by thin, raised transversal wrinkles. The valves gape. The lips protrude and are covered by the edge. The beaks are pointed, curve forward, and touch each other. Another thinner ligament is visible behind the beaks. The entire shell is white in colour.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 2. lin., lat. 1. poll. 7. lin. [30.7 mm, 41.7 mm]

– **Locality:** Patria ignota.

– **Additional notes:** *A Tellina rugosa Pennanti Cl. V. tab. 57. f. 34 omnino distincta* [differing completely from *Tellina rugosa* Pennant Cl. V. tab. 57. f. 34].

New measurements. NHMW-ZOO-MO-14017: H: 36 mm, L: 45.3 mm. NHMW-ZOO-MO-14023: H: 29 mm, L: 41.3 mm.

Family Donacidae J. Fleming, 1828***Venus paradoxa* Born, 1778**Current name: ***Galatea paradoxa* (Born, 1778)**

Born common names: German: Die blaustreifige Aftervenus

Fig. 30

Born 1778: p. 53. No figure given.

Born 1780: p. 66. Plate IV, fig. 12 & 13.

Type material. Holotype: NHMW-ZOO-MO-14069, 1 right valve.

Original description in Born 1778.

Latin: *Testa triangula, solida, utrinque complanata, labris prominentibus.*

Testa ponderosa, triangula, laevis, utrinque complanata. Labra porrecta crassa. Dentes cardinis primarii duo, lateralis utrinque unus brevis solidus. Color testae albus, lateribus radiisque latis violaceis.

German: Die dreyseitige dichte beiderseits zusammengedrückte Schale ist mit hervorragenden Lippen versehen.

Die Schale ist schwer, dreyeckig, und glatt, an beiden Seiten platt gedrückt. Die dicken Lippen ragen hervor. Am Schloße sind zween Mittelzähne, und beiderseits ein dicker Nebenzahn. Die Schale ist weiß, mit breiten Strahlen, die Seitenflächen von violeter Farbe.

Translation into English: Shell triangular, solid, complanate on both sides, with prominent lips.

The shell is heavy, triangular, and smooth, complanate on both sides. The lips are thick and protrude. The hinge has two cardinal teeth and a thick lateral tooth on each side. The shell is white with broad rays and side surfaces of violet colour.

Additional remarks from Born 1780.

– **Size:** Long. 2. poll. 6. lin., lat. 3. poll. 4. lin. [65.9 mm, 87.8 mm]

– **Locality:** Patria ignota.

– **Additional notes:** “*Valva solitaria*” [single valve].

New measurements. NHMW-ZOO-MO-14069: H: 66.2 mm, L: 87.6 mm.

Remarks. Born (1780) clarified he had at his disposal only a single valve; hence, we consider this specimen the holotype.

Family Psammobiidae J. Fleming, 1828***Tellina anomala* Born, 1778**Current name: ***Asaphis violascens* (Forsskål, 1775)**

Born common names: German: Die unächte Tellmuschel

Fig. 31

Born 1778: p. 20–21. No figure given.

Born 1780: p. 31–32. No figure given.

Type material. Lectotype (designated by Willan (1993)): NHMW-ZOO-MO-14020, 1 complete specimen. Paralectotype: NHMW-ZOO-MO-14019, 1 complete specimen.

Additional original references. Lister (1687), fig. 273; Knorr (1769), Part 2, plate XX, fig. 1 and Part 6, plate VI, fig. 2.

Original description.

Latin: *Testa subovata lata, ventricosa, longitudinaliter rugosa, striis transversis utrinque scabra, limbo antico intus violaceo.*

Testa subovata lata ventricosa, antice utrinque obsolete carinata. Sulci longitudinales undulati, striis transversis prope extremitates exasperati. Apices umbonati incurvati. Ligamentum crassius ante apices, & retro hos tenuius alterum. Dentes primarii duo, alter bifidus, laterales nulli. Limbus internus praesertim anticus violaceus.

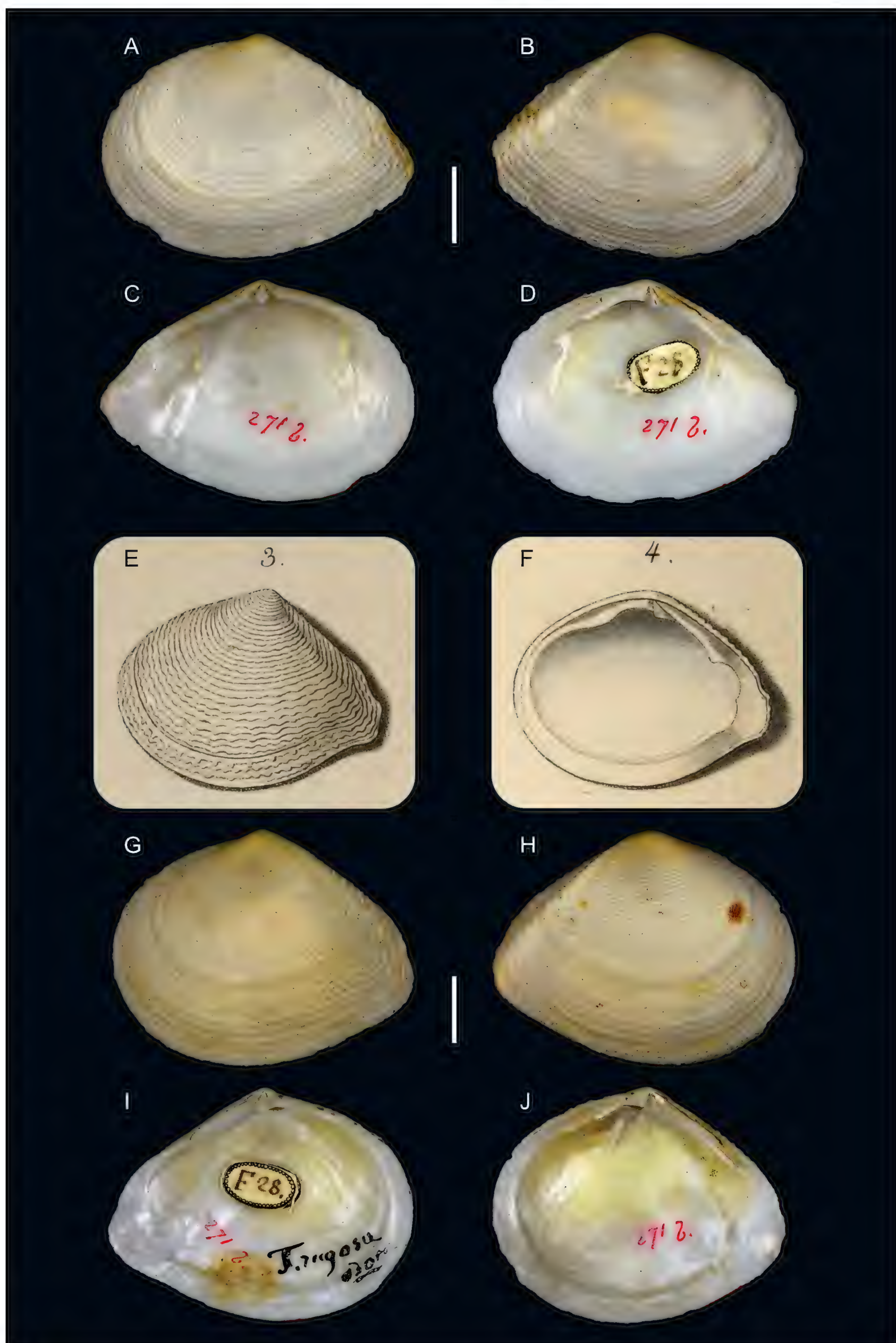


Figure 29. *Tellina rugosa* Born, 1778. A–D. Syntype NHMW-ZOO-MO-14017: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). E, F. Figures from Born (1780), Plate II, No. 3 & 4. G–J. Syntype NHMW-ZOO-MO-14023: left valve exterior (G) and interior (I), right valve exterior (H) and interior (J). Scale bars: 1 cm.

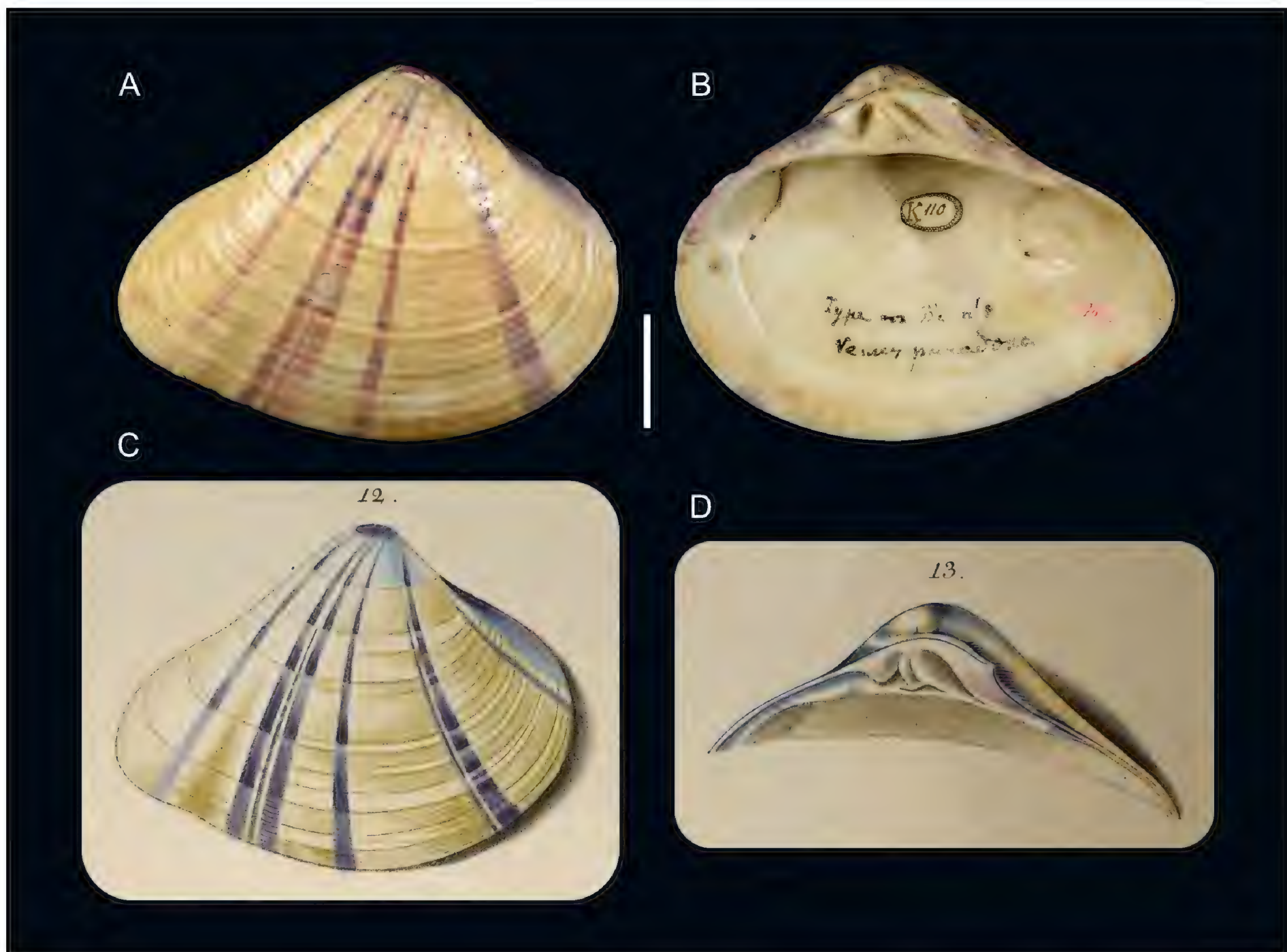


Figure 30. *Venus paradoxa* Born, 1778. Holotype NHMW-ZOO-MO-14069, right valve only: right valve exterior (A) and interior (B), figures from Plate IV, No. 12 & 13 (C, D). Scale bar: 2 cm.

α pallide lutescens intus lutea.

β alba apicibus violaceis, intus tota violacea.

γ violacea, alboradiata intus violacea, albque.

δ alba, cavitate & apibus miniatis.

German: Die etwas eyförmige breite bäuchige Schale ist der Länge nach runzelicht, und durch Querstreife an den Seitenenden rauh, inwendig am Vorderrande violet.

Die Schale ist etwas eyförmig, breit und bäuchig, an beiden Seiten vorne mit einer stumpfen Ecke versehen. Nach der Länge herab laufen runzelichte Furchen, welche von Querstreifen durchkreuzet den Seitenenden ein rauhes Ansehen geben. Die Spizen sind aufgeblasen und einwärts gekrümmt. Vor den Spizen ist das gewöhnliche dicke Band, und hinter denselben noch ein anderes dünneres. Das Schloß hat zween Hauptzähne, deren einer zweispaltig ist. Die Seitenzähne fehlen. Der innere Rand ist besonders vorne violet.

α blaßgelb, inwendig gelb.

β Weiß, mit violeten Spizen und gleichfärbiger Höhlung.

γ Violet mit weißen Strahlen, mit blau und weiß gefleckter innerer Höhlung.

δ Weiß mit meningfarbiger Höhlung und Spizen.

Translation into English: Shell slightly ovate, broad, bulging, longitudinally wrinkled, rough on both ends due to transversal stripes, inner anterior margin purple.

The shell is nearly ovate, broad, and bulging, with a blunt angle at the front on both sides. The longitudinal grooves are undulating and intersected by transversal stripes close to the anterior and posterior margins, giving a rough appearance. The umbos are swollen and curve inward. In front of the beaks there is the usual thick ligament, with an additional thinner one behind them. The hinge has two cardinal teeth, one of which is bifid. There are no lateral teeth. The inner margin is purple, especially at the front [again, it should be “back”].

α Pale yellow, interior yellow.

β White, with purple umbos and a matching purple inner surface.

γ Purple with white ribs, interior speckled in blue and white.

δ White with vermillion-coloured inner surface and umbos.

Additional remarks from Born 1780.

– **Common Names:** Belgian: Gestraalde Baccassan.

- **Size:** Long. 1. poll., lat. 2. poll. [26.3 mm, 52.7 mm]
- **Locality:** Habitat in insula Mauritii & ad Barbados, Lister.

New measurements. NHMW-ZOO-MO-14019: H: 45.1 mm, L: 66.8 mm. NHMW-ZOO-MO-14020 (colour form α): H: 31.3 mm, L: 48.5 mm.

Remarks. Synonymy treated by Willan (1993), who indicated the (para)lectotypes with Born's original catalogue numbers on the labels attached to the shells, now superseded by the modern inventory numbers here reported (Willan's 3049 is NHMW-ZOO-MO-14019 and 3051 is NHMW-ZOO-MO-14020).

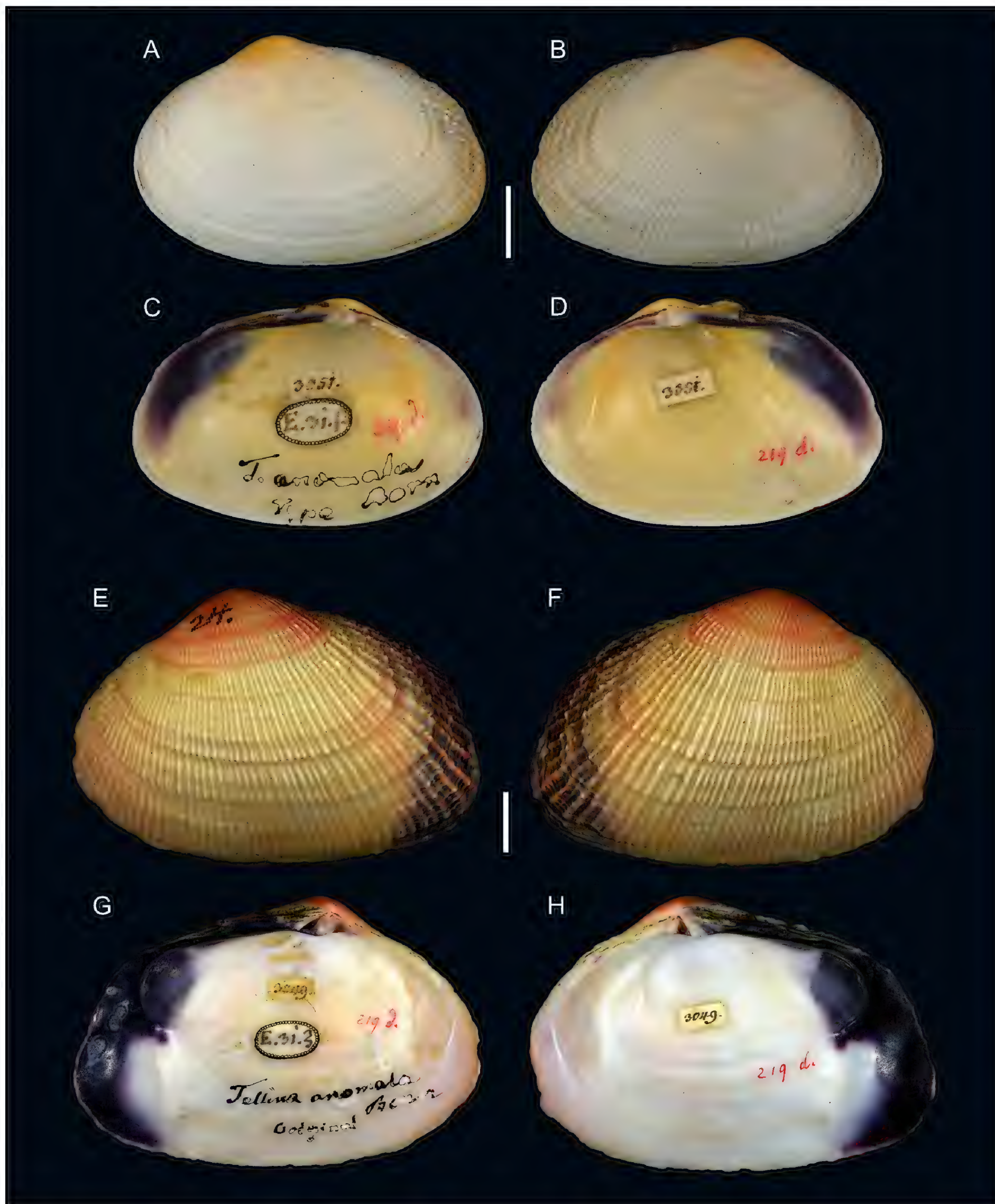


Figure 31. *Tellina anomala* Born, 1778. A–D. Lectotype NHMW-ZOO-MO-14020: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). E–H. Paralectotype NHMW-ZOO-MO-14019: left valve exterior (E) and interior (G), right valve exterior (F) and interior (H). Scale bars: 1 cm.

Family Arctiidae R. B. Newton, 1891 (1844)***Venus buccardium* Born, 1778**Current name: ***Arctica islandica* (Linnaeus, 1767)**

Born common names: German: Das unächte Ochsenherz

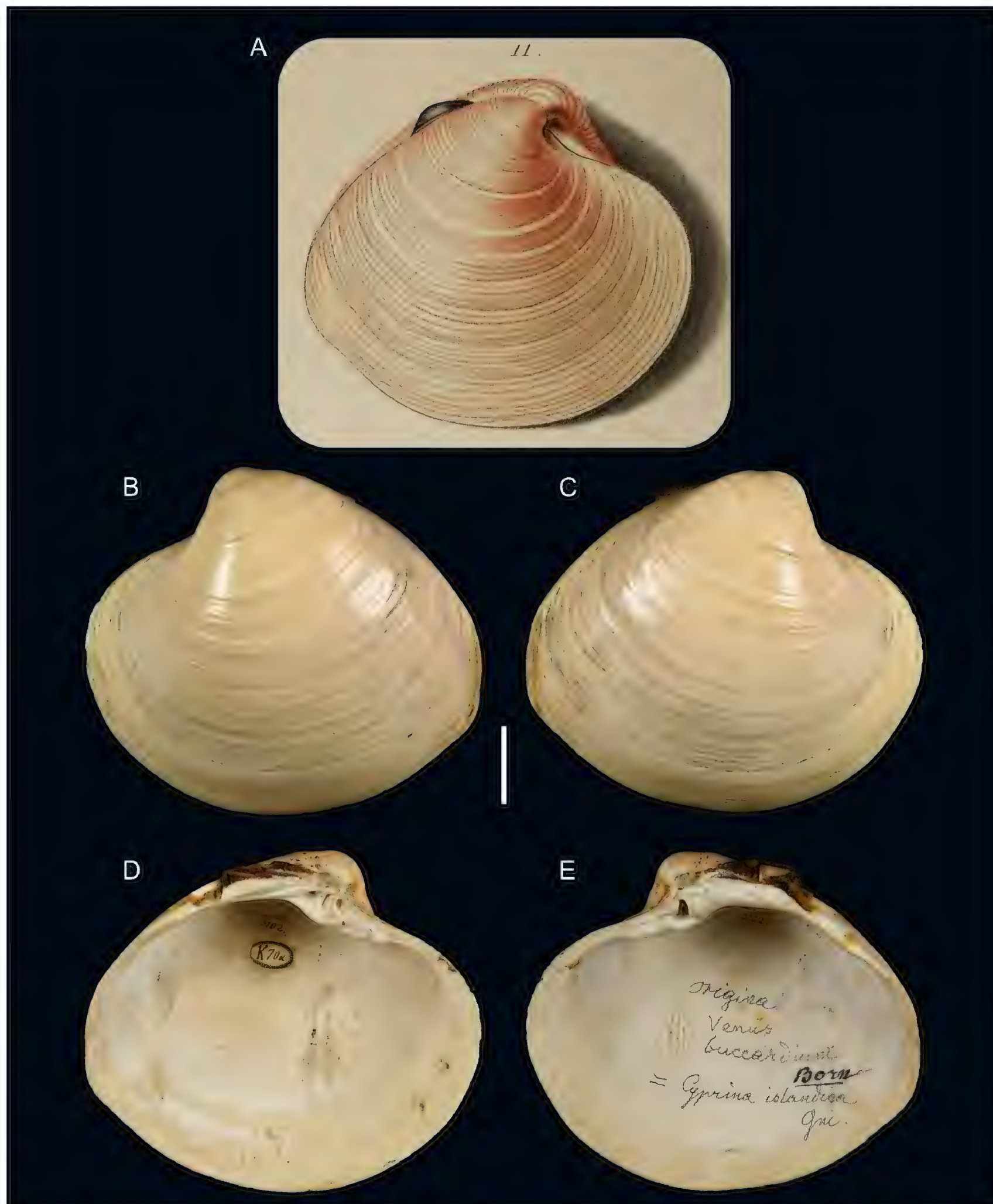
Fig. 32

Born 1778: p. 49–50. No figure given.

Born 1780: p. 63. Plate IV, fig. 11.

Type material. Syntype: NHMW-ZOO-MO-14064, 1 complete specimen.**Original description.****Latin:** *Testa cordata solida laevi, areolae excavatae vestigio indistincto, limbo integro.**Testa cordata solida, laevis, transversim tenuissime striata, undique umbonata; retro apices recurvatos contiguo concava, vestigio nec intruso, nec circumscripto. Dentes generi proprii, crassi.***German:** Die herzförmige dichte glatte Muschel ist an der Hinterfläche ausgehöhlet ohne deutlichen Eindruck, und am inneren Rande glatt.

Die dichte herzförmige glatte nach der Quere sehr fein gestreifte Schale ist allenthalben bäuchig; hinter

**Figure 32.** *Venus buccardium* Born, 1778. Syntype NHMW-ZOO-MO-14064: figure from Born (1780), Plate IV, No. 11 (A), left valve exterior (B) and interior (D), right valve exterior (C) and interior (E). Scale bar: 2 cm.

den rückwärts gebogenen Spizen, die einander berühren, ausgehöhlet, ohne deutlichen Eindruck oder Einfassung. Die Zähne sind dick und nach der Art des Geschlechts beschaffen.

Translation into English: Solid, heart-shaped and smooth shell, lunule slightly concave but indistinct, inner margin smooth.

The dense, heart-shaped, smooth shell is very finely transversally striated and bulging throughout. Behind the opisthogyrate beaks, which touch each other, it is concave without any distinct impression or border. The teeth are thick and characteristic of the genus.

Additional remarks from Born 1780.

– **Size:** Long. 3. poll. 2. lin., lat. 3. poll. 8. lin. [83.4 mm, 96.6 mm]

– **Locality:** Patria ignota.

New measurement. NHMW-ZOO-MO-14064: H: 83.1 mm, L: 95.1 mm.

Family Veneridae Rafinesque, 1815

Venus callipyga Born, 1778

Current name: *Circenita callipyga* (Born, 1778)

Born common names: German: Die weißbackige Venus

Fig. 33

Born 1778: p. 55–56. No figure given.

Born 1780: p. 68. Plate V, fig. 1.

Type material. Syntypes: NHMW-ZOO-MO-14073, 1 complete specimen; Buonanni (1681), *Classe seconda*: fig. 62.

Original description.

Latin: *Testa ovata latiuscula, transverse inaequaliter striata, lineis picta angulatis, areola ovali.*

Testa ovata, latiuscula, parumper complanata, striis transversis inaequalibus, picta lineis angulatis, sursum convergentibus, fuscis. Areola ovalis, impressa, striata. Color lutescens; characteribus angulatis fuscis. Umbones nivei.

German: Die eyförmige breite Schale ist der Quere nach mit ungleichen Streifen besetzt, mit winkelförmigen Linien bemalet, und an der Hinterfläche eyförmig.

Die herzförmige [error, should be „eyförmige“] etwas breite Schale ist einigermaßen flachgedrückt, und in die Quere ungleichförmig gestreift. Die winkelförmigen Linien, mit welchen sie bemalet ist, laufen aufwärts zusammen. Die Hinterfläche ist eyförmig, eingedrückt und gestreift. Die Schale gelblich, die Winkelzüge braun, und die Wölbung schneeweiß.

Translation into English: Shell ovate and rather broad, transversally unequally striated, with a pattern of angled lines and an oval lunule.

The ovate, rather broad shell is slightly flattened and irregularly striated transversally. The brown, angled lines

converge upwards. The lunule is egg-shaped, concave, and striated. The colour of the shell is yellowish, the angular patterns are brown, and the umbos white.

Additional remarks from Born 1780.

– **Size:** Long. 10. lin., lat. 1. poll. 1. lin. [22 mm, 28.5 mm]

– **Locality:** Ad littus ulyssiponense, *Bonanni*.

New measurements. NHMW-ZOO-MO-14073: H: 22.7 mm, L: 27.8 mm.

Venus circinata Born, 1778

Current name: *Lamelliconcha circinata* (Born, 1778)

Born common names: German: Die gereifte Venus

Fig. 34

Born 1778: p. 47. No figure given.

Born 1780: p. 61. Plate IV, fig. 8.

Type material. Syntypes: NHMW-ZOO-MO-76522, 1 complete specimen; NHMW-ZOO-MO-76523, 1 complete specimen; NHMW-ZOO-MO-765224, 1 complete specimen.

Original description.

Latin: *Testa subcordata, membranis transversis arctis, areola impressa ovata, limbo integro.*

Testa figura V. Dionis subcordata, umbonata transversis elevatis imbricatis arctis. Sinus utrinque labiatus, labiis subaequalibus. Areola cordata impressa. Limbus integerrimus. Color pallide roseus, radiis obsoletis albis.

German: Die fast herzförmige Schale ist mit häutigen Querringen umgeben, mit einer eyförmigen eingedrückten Hinterfläche und ganzem Rande.

Die herzförmige bäuchige Schale hat die Gestalt der ächten Venusmuschel. Sie ist der Quere nach mit erhabenen ziegelförmiggestellten, hintereinander stehenden Ringen umgürtet. Die vordere Vertiefung ist beiderseits mit einem beinahe gleichgroßen Lefzen versehen. Die hintere Fläche ist eyförmig und vertieft. Der innere Rand ohne allen Einschnitt. Der Farbe nach ist sie blaßroth, mit matten weißen Strahlen.

Translation into English: Shell almost heart-shaped, with co-marginal lamellar ribs, ovate and concave lunule and smooth margin.

The heart-shaped, bulging shell has the typical shape of true Venus clams. It features raised, co-marginal rings arranged in a brick-like manner. The escutcheon is flanked on both sides by nearly equal-sized lips. The lunule is ovate and depressed. The inner edge is entirely smooth, without any notches. The colour is pale red with dull white rays.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 2. lin, lat. 1. poll. 4. lin. [30.7 mm, 35.1 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-76522: H: 41.5 mm, L: 46.9 mm. NHMW-ZOO-MO-76523:

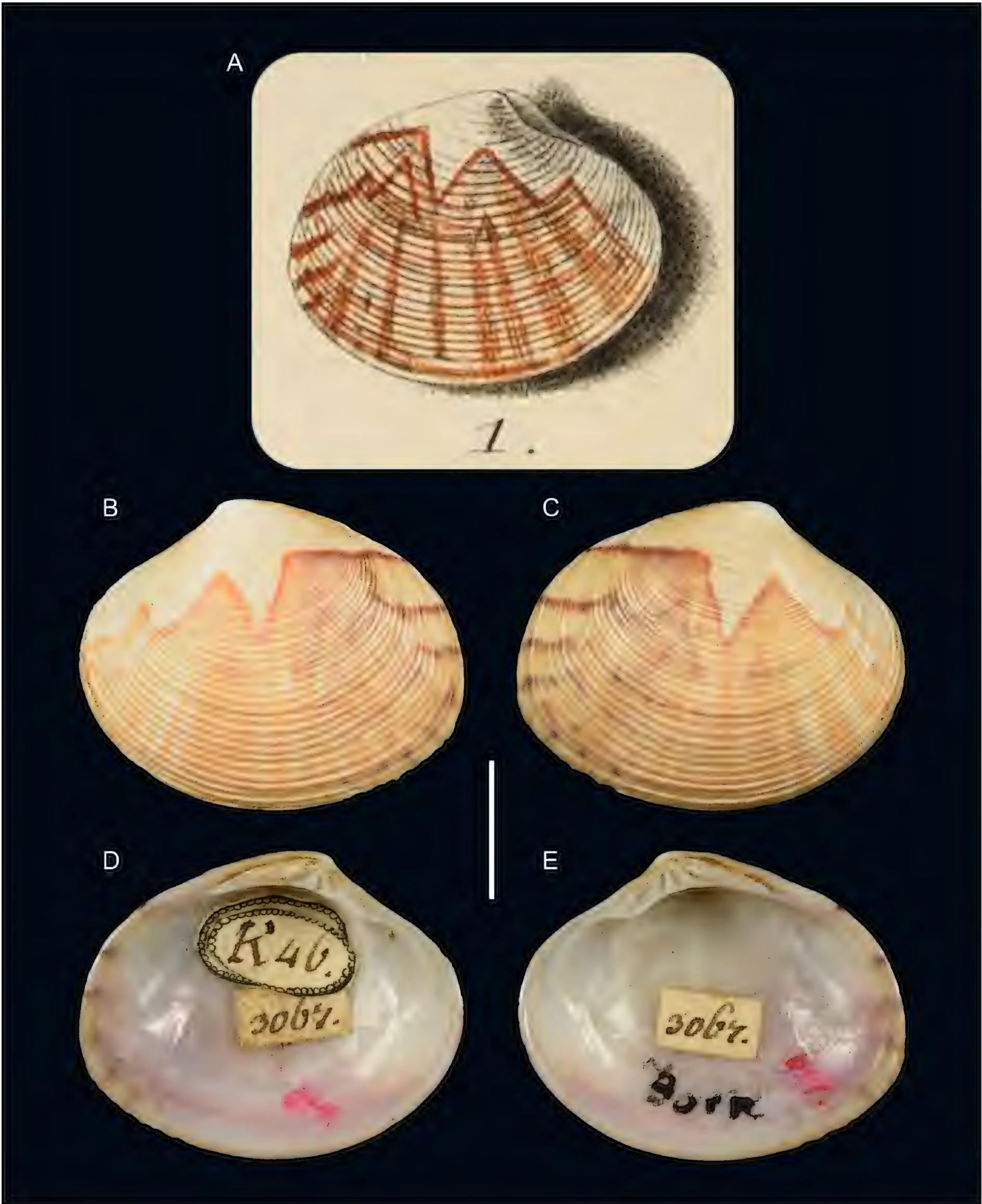


Figure 33. *Venus callipyga* Born, 1778. Syntype NHMW-ZOO-MO-14073: figure from Born (1780), Plate V, No. 1 (A), left valve exterior (B) and interior (D), right valve exterior (C) and interior (E). Scale bar: 1 cm.

H: 34.6 mm, L: 38.6 mm. NHMW-ZOO-MO-76524: H: 32.6 mm, L: 36.2 mm.

Remarks. Brauer (1878) stated that the old catalogue lists three specimens, which are all available [the above syntypes], and that one specimen of variation α was giv-

en to the Bishop Sigismund Ernst of Hohenwart (1745–1825), presumably the specimen figured on Plate IV, because none of the existing specimens exactly matches the drawing. Nothing is known about the whereabouts of the Hohenwart collection.

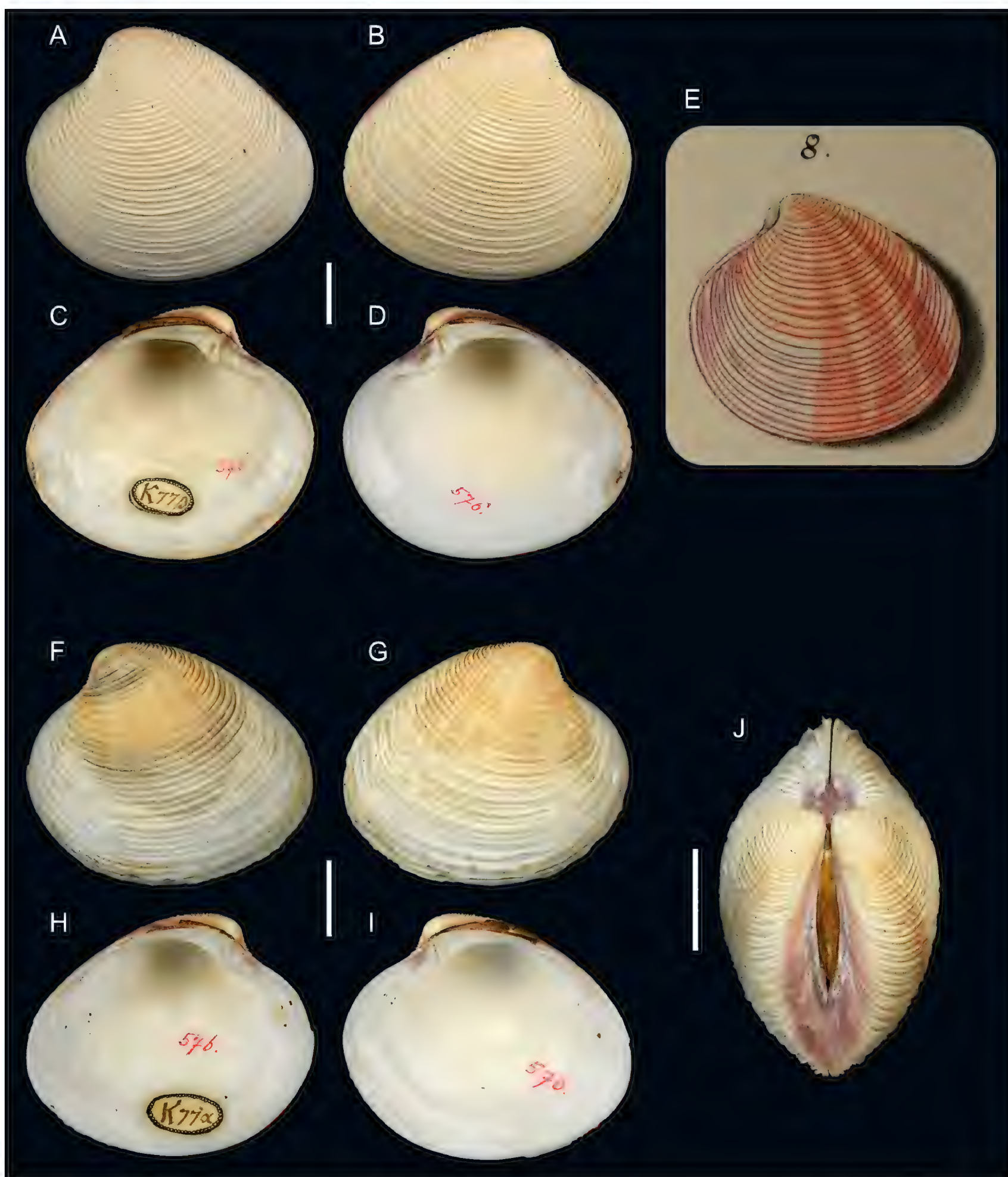


Figure 34. *Venus circinata* Born, 1778. **A–D.** Syntype NHMW-ZOO-MO-76522: left valve exterior (**A**) and interior (**C**), right valve exterior (**B**) and interior (**D**). Figure from Born (1780), Plate IV, No. 8 (**E**). **F–I.** Syntype NHMW-ZOO-MO-76523: left valve exterior (**F**) and interior (**H**), right valve exterior (**G**) and interior (**I**). Syntype NHMW-ZOO-MO-765224, dorsal view of escutcheon, beaks, and lunule (**J**). Scale bars: 1 cm.

***Venus mactroides* Born, 1778**

Current name: *Tivela mactroides* (Born, 1778)

Born common names: German: Die Korbvenus

Fig. 35

Born 1778: p. 52. No figure given.

Born 1780: p. 65. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14067, 1 complete specimen; Lister (1687), fig. 85; Knorr (1769), Part 5, plate XV, fig. 2.

Original description.

Latin: *Testa triangula umbonata laevi, utrinque complanata; cardinis dente laterali remoto.*

Testa, similis Mactrae stultorum L.; triangula subaequilatera laevis, transversim tenuissime striata, utrinque prope apices complanata, planis subaequalibus. Apices incurvi. Dentes primores tres, structura congenerum, quibus accedit postice lateralis remotus. Color testae extus fulvus, radiis albis; apicem violaceus.

German: Die dreieckige bäuchige glatte Schale ist beiderseits plattgedrückt, und am Schlosse mit einem entfernten Seitenzahn versehen.



Figure 35. *Venus mactroides* Born, 1778. Syntype NHMW-ZOO-MO-14067: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). Scale bar: 1 cm.

Die Schale, welche die Gestalt des Strahlkorbes hat, ist dreyeckig, beinahe gleichseitig und glatt, in die Quere fein gestreift, an den Seiten nächst den Spizen mit zwoen fast gleich großen platten Flächen versehen. Die Spizen krümen sich einwärts. Drei Mittelzähne sind am Schloße von gewöhnlicher Gestalt, außer welchen hinten ein entfernter Seitenzahn stehet. Die Schale ist außen braunroth mit weißen Strahlen, an den Spizen violet.

Translation into English: Shell triangular, bulging and smooth, complanate on both sides, with a distant lateral tooth.

The shell resembles *Macra stultorum* L. It is triangular, nearly equilateral, and smooth, with very fine transversal stripes. Close to the beaks, there are two flat surfaces of almost equal size. The tips curve inwards. The hinge features three cardinal teeth of typical shape and a distant lateral tooth at the back. The outer surface of the shell is brownish-red with white rays; the beaks are violet.

Additional remarks from Born 1780.

- **Common Names:** Belgian: Gestraalde Kwaker, French: Quacre rayonné.
- **Size:** Long. 11. lin., lat. 1. poll. 1. lin. [24.1 mm, 28.5 mm]
- **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14067: H: 26.6 mm, L: 30.6 mm.

***Venus rivularis* Born, 1778**

Current name: *Circe rivularis* (Born, 1778)

Born common names: German: Die aderige Venus

Fig. 36

Born 1778: p. 59–60. No figure given.

Born 1780: p. 72. Plate V, fig. 7.

Type material. Syntype: NHMW-ZOO-MO-14078, 1 complete specimen.

Original description.

Latin: *Testa orbiculata, transverse striata, umbonibus complanatis rugosis, areola plana.*

Testa orbiculata gibba, transverse striata; Umbones complanati, rugis bifariam divergentibus obsiti. Areola plana laevis. Color pallide luteus, areolae fuscus.

German: Die scheibenförmige in die Quere gestreifte Schale ist auf den flachgedrückten Wölbungen durch erhabene Adern runzelicht, und mit einer platten Hinterfläche versehen.

Die Schale ist scheibenrund, höckerig, in die Quere gestreift. Die Wölbungen platt gedrückt, und mit Runzeln besetzt, welche nach zwoen Seiten auseinander laufen. Die Hinterfläche ist eben und glatt; die Farbe bleich gelb, die Hinterfläche braun.

Translation into English: Shell disc-shaped, transversally striated, with flattened, wrinkled umbos and flat lunule.

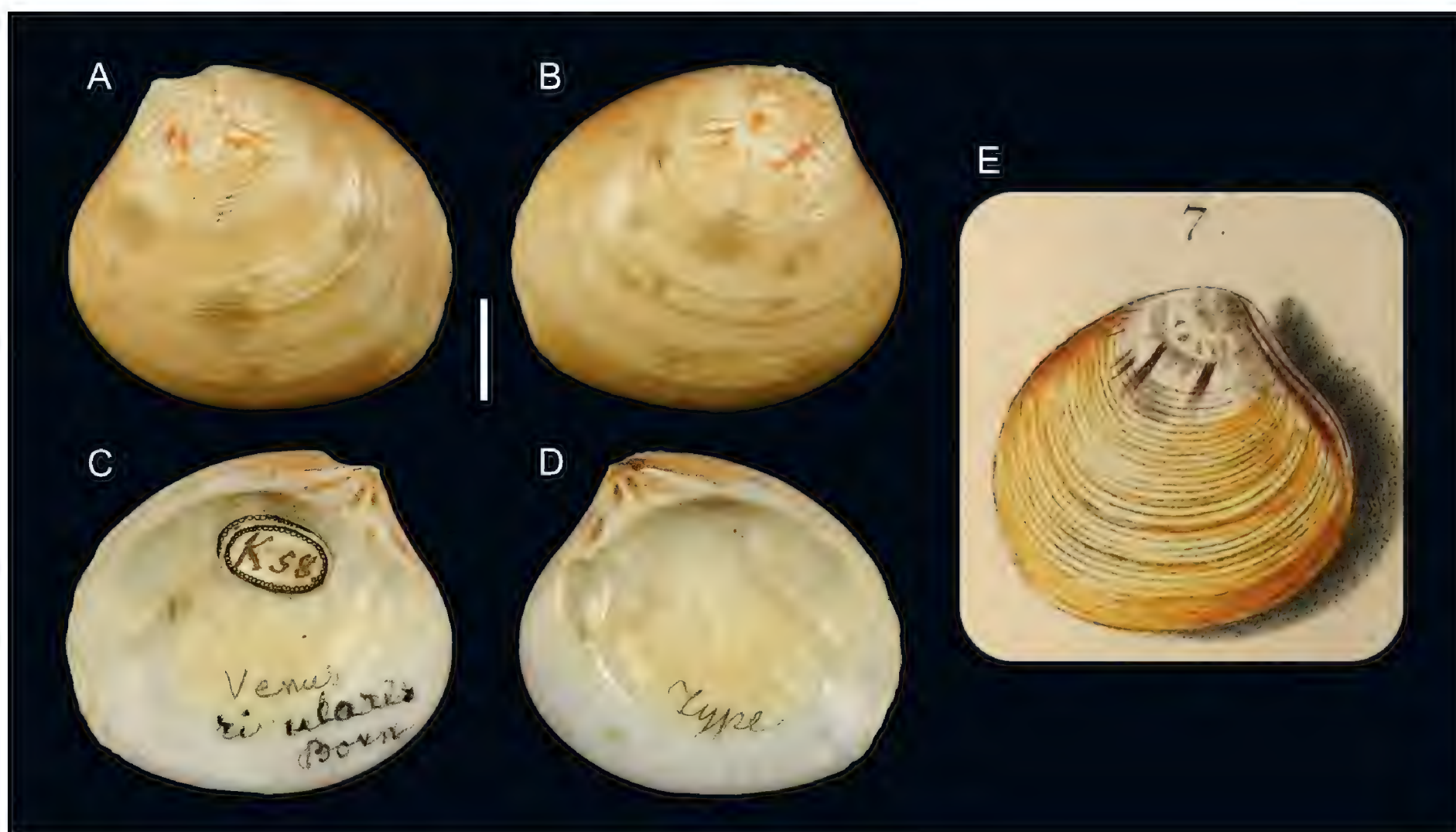


Figure 36. *Venus rivularis* Born, 1778. Syntype NHMW-ZOO-MO-14078: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D), figure from Born (1780), Plate V, No. 7 (E). Scale bar: 1 cm.

The shell is disc-shaped, humped, and transversally striated. The umbos are flattened and covered with wrinkles that diverge to two sides. The lunule is even and smooth. The colour is pale yellow, the lunule brown.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll. 3. lin., lat. 1. poll. 5. lin. [32.9 mm, 37.3 mm]

– **Locality:** Patria ignota.

New measurements. NHMW-ZOO-MO-14078: H: 34.6 mm, L: 37.4 mm.

***Venus sinuata* Born, 1778**

Current name: *Chamelea gallina* (Linnaeus, 1758)

Born common names: German: Die ausgekehrte Venusmuschel
Fig. 37

Born 1778: p. 48–49. No figure given.

Born 1780: p. 62. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14061, 1 complete specimen; NHMW-ZOO-MO-14062, 1 complete specimen; Lister (1687), fig. 131; Knorr (1769), Part 5, plate XIV, fig. 2 and 5.

Original description.

Latin: *Testa subcordata, transverse inaequaliter sulcata, sinu antico lato declivi, limbo crenulato.*

Testa subcordata complanata glabra, sulcis transversis inaequalibus. Sinus anticus latus introrsum declivis. Areola plana. Limbus cernulatus. Color pallidus fusconebulosus, radiis obsoletis pallidis.

German: Die fast herzförmige Schale hat ungleiche Querfurchen, eine vertiefte Vorderfläche, und einen innwendig feingekerbten Rand.

Die Schale ist einigermaßen herzförmig, plattgedrückt und glatt, der Quere nach mit ungleichen Furchen versehen. Die vordere Vertiefung ist breit und einwärts abhängig. Die Hinterfläche ist eben. Der innere Rand fein gekerbt. Die Farbe braun nebelicht, mit matten bleichen Strahlen.

Translation into English: Shell nearly heart-shaped, with transversal, unequal furrows, steeply sloping lunule and finely crenulated inner margin.

The shell is somewhat heart-shaped, compressed, and smooth, with unequal transversal furrows. The depression anterior to the beaks is broad and slopes inwards. The escutcheon is flat. The inner margin is finely crenulated. The colour is pale brown with dull, whitish rays.

Additional remarks from Born 1780.

– **Size:** Long. 1. poll., lat. 1. poll. 2. lin. [26.3 mm, 30.7 mm]

– **Locality:** Habitat in mari adriatico, Knorr.

– **Additional notes:** *Distinguenda a Venere sinuosa Pennanti, Brit. Zool. Cl. V. tab. 55. f. 51.* [To be distinguished from *Venus sinuosa* Pennant, British Zoology, Class V, plate 55, figure 51].

Planta marina fasciculatim adnata est testae, velut in specimine a Knorr io l. c. depicto. [A tuft of marine plants is attached to the shell, as in the specimen depicted by Knorr in the cited work].

New measurements. NHMW-ZOO-MO-14061: H: 26.5 mm, L: 30.5 mm. NHMW-ZOO-MO-14062: H: 24.9 mm, L: 28.9 mm.

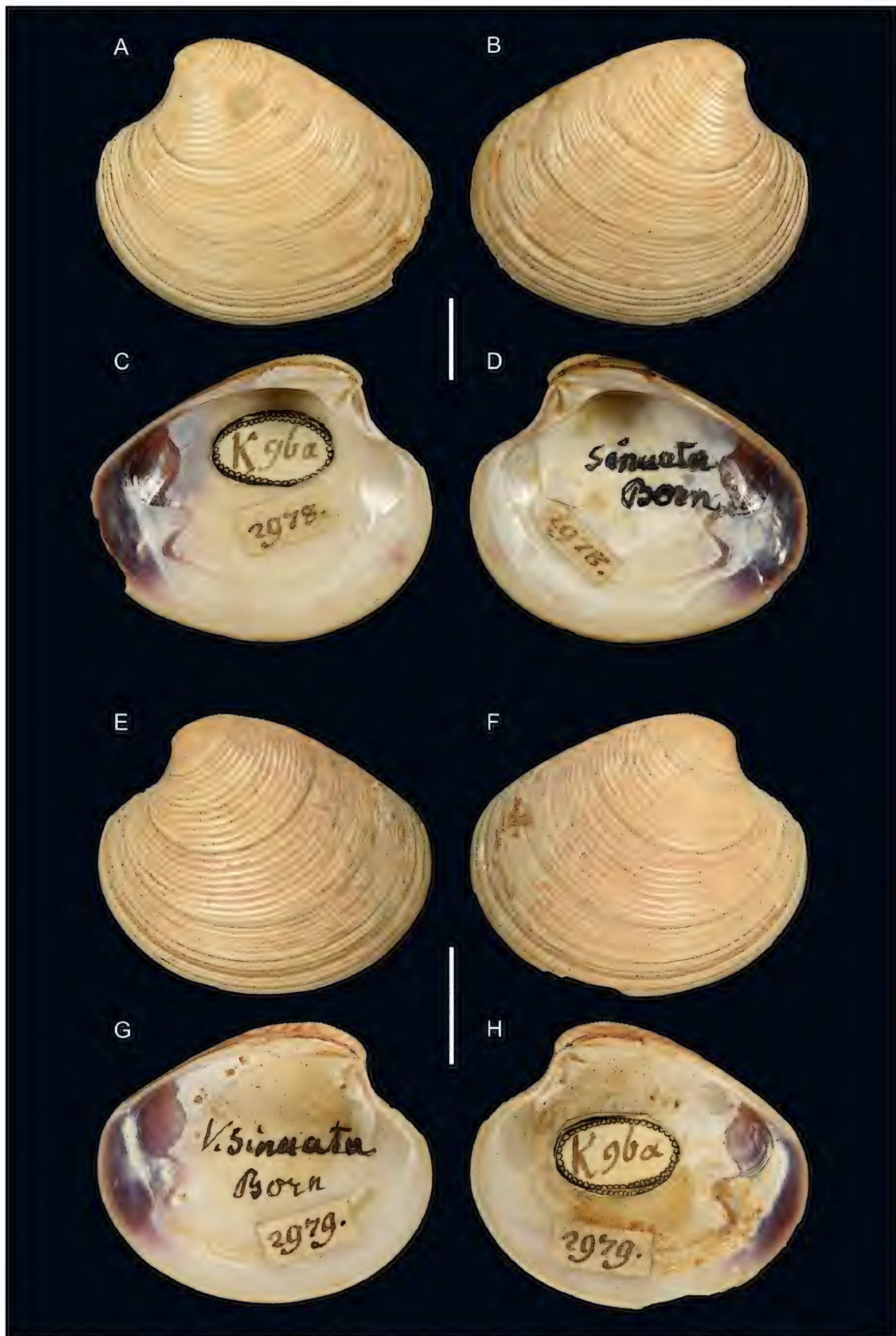


Figure 37. *Venus sinuata* Born, 1778. A–D. Syntype NHMW-ZOO-MO-14061: left valve exterior (A) and interior (C), right valve exterior (B) and interior (D). E–H. Syntype NHMW-ZOO-MO-14062: left valve exterior (E) and interior (G), right valve exterior (F) and interior (H). Scale bars: 1 cm.

***Venus undulata* Born, 1778**Current name: ***Paratapes undulatus* (Born, 1778)**

Born common names: German: Die wellenförmige Venus

Fig. 38

Born 1778: p. 54–55. No figure given.

Born 1780: p. 67. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14072, 1 complete specimen; Knorr (1769), Part 2, plate XXVIII, fig. 4; Petiver (1764), plate CV, fig. 2.

Original description in Born 1778.

Latin: *Testa ovali lata, striis transversis undulatis, planis utrinque lanceolatis.*

Testa ovalis complanata lata, glabra, striis transversis undulatis, ad apices utrinque longitudinaliter complanata, planis laevibus lanceolatis. Dentes cardinis duo bifidi, tertius indivisus. Color albus, venis angulatis fulvis, planorum venis transversis undulatis, rubro purpureis.

German: Die eyförmige breite Schale ist der Quere nach mit runzelichten Streifen, und beiderseits mit lanzetförmigen Flächen versehen.

Die Schale ist plattgedrückt, breit, glatt, mit wellenförmigen nach der Quere laufenden Streifen umgeben, nächst den Spizen beiderseits nach der

Länge flach gedrückt, mit glatten lanzetförmigen Flächen. Am Schloße sind zween zweispaltige Zähne, der dritte äußere ist spizig und ungetheilt. Die Farbe ist weiß mit braungelben winkelförmigen Adern, über die Quere der Flächen laufen wellenförmige purpurrothe Adern.

Translation into English: Shell oval and broad, with undulating transversal stripes, the areas in front and behind of the beaks are lanceolate.

The shell is flattened, broad, and smooth, with undulating transversal stripes. Anterior and posterior to the beaks, it is longitudinally flattened, with smooth, lanceolate areas. Two cardinal teeth are bifid; the third, outer tooth is sharp and undivided. The shell is white with brownish-yellow angular veins; the dorsal areas are crossed by wavy purple veins.

Additional remarks from Born 1780.

- **Size:** Long. 1. poll., lat. 1. poll. 11. lin. [26.3 mm, 50.5 mm]
- **Locality:** Patria ignota.
- **Additional notes:** *A Venere undata Pennanti Brit. Zool. Cl. V. tab. 55. f. 51. distincta* [differing from *Venus undata* Pennant, British Zoology, Class V, plate 55, figure 51].

New measurements. NHMW-ZOO-MO-14072: H: 27.5 mm, L: 50.1 mm.

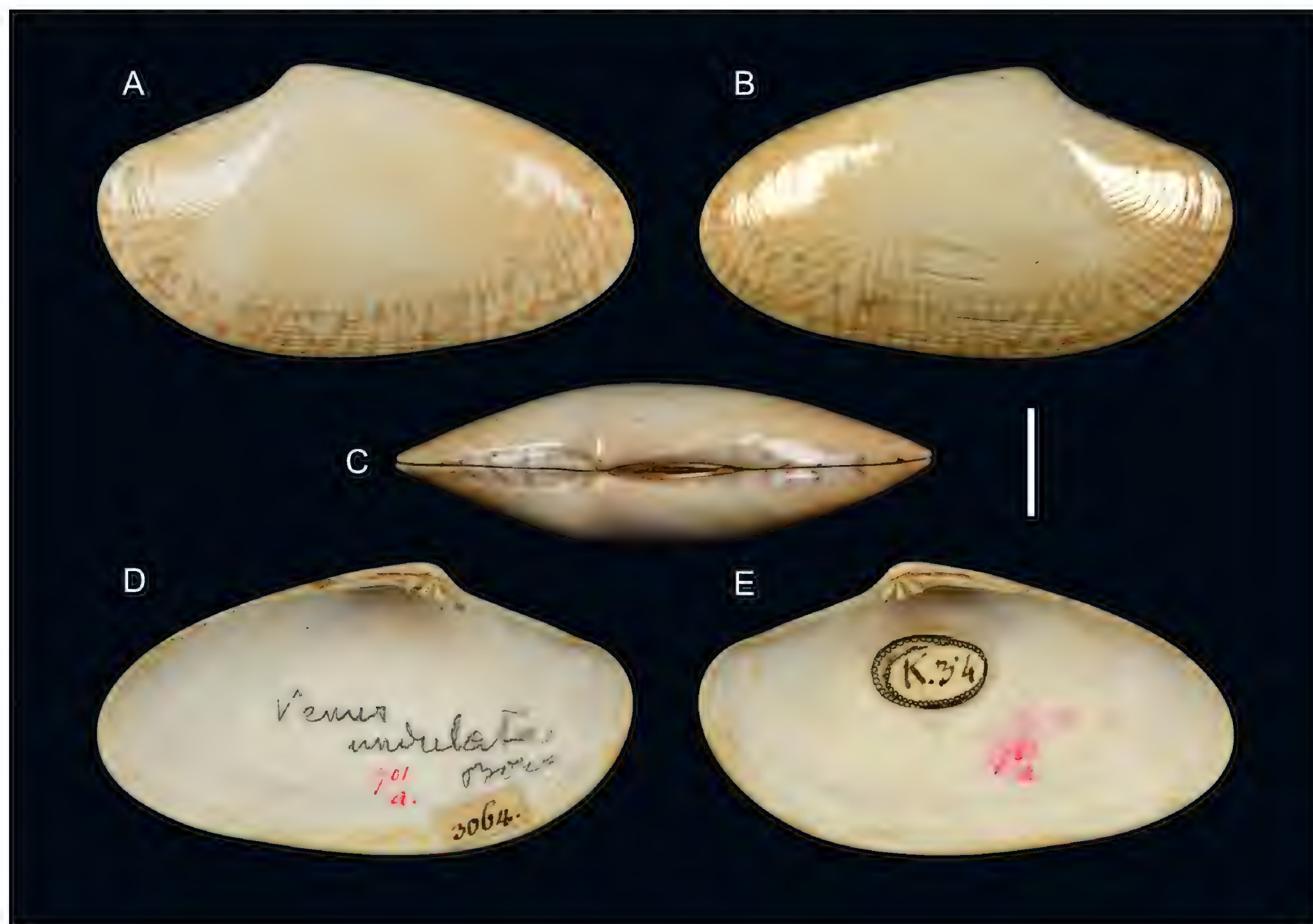


Figure 38. *Venus undulata* Born, 1778. Syntype NHMW-ZOO-MO-14072: left valve exterior (A) and interior (D), right valve exterior (B) and interior (E), dorsal view of articulated shell (C). Scale bar: 1 cm.

Family Hiatellidae J. E. Gray, 1824***Mya glycimeris* Born, 1778**Current name: ***Panopea glycimeris* (Born, 1778)**

Born common names: German: Die bäuchige Klafmuschel

Fig. 39

Born 1778: p. 10. No figure given.

Born 1780: p. 20. Plate I, fig. 8.

Type material. Syntypes: NHMW-ZOO-MO-14490, 1 complete specimen; Aldrovandi (1642): p. 473–474, Lister (1687): fig. 258, Gualtieri (1742): plate 90, fig. A.

Original description in Born 1778.

Latin: *Testa umbonata, extremitatibus oblique truncatis, dente antico crassissimo, longitudine ligamenti.*

Testa subovata umbonata laevis, pone apices utrinque coarctata, extremitates oblique truncatae hiantes; Dens

anticus fere longitudine ligamenti, crassissimus, posticus minor, subjacens apicibus incurvatis, retro quos series crenularum extenditur. Color pallido griseus.

German: Die bäuchige Schale hat schiefe stumpfe Seitenende, und einen sehr dicken Vorderzahn nach der Länge des Bandes.

Die etwas eyförmige bäuchige und glatte Schale ist an den Spizen beiderseits ausgehölet. Die Seitenende sind schief und stumpf. Der Vorderzahn ist sehr dick, fast von der Länge des Bandes: der Hinterzahn ist kleiner, liegt unter den einwärts gekrümmten Spizen, hinter welchen eine Reihe kleiner Kerbe ausläuft; ihre Farbe ist lichtgrau.

Translation into English: The convex shell has oblique, blunt lateral ends and a very thick anterior tooth the length of the ligament.

The subovate, convex, and smooth shell is gaping on both sides near the tips. The lateral ends are oblique and blunt. The anterior tooth is very thick, almost as long as

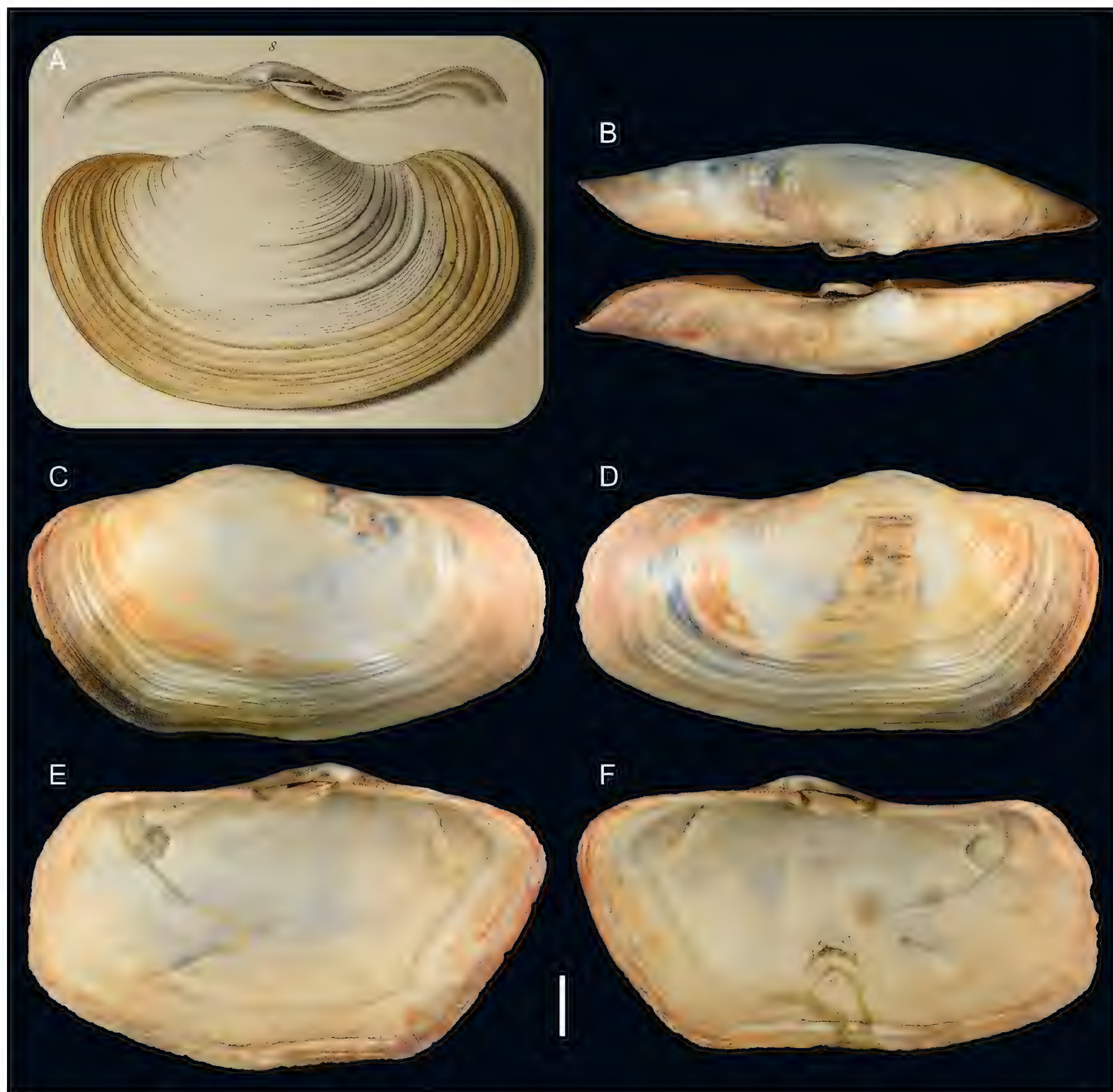


Figure 39. *Mya glycimeris* Born, 1778. Syntype NHMW-ZOO-MO-14490: figure from Born (1780), Plate I, No. 8 (A), dorsal view of articulated shell (B), left valve exterior (C) and interior (E), right valve exterior (D) and interior (F). Scale bar: 3 cm.

the ligament; the posterior tooth is smaller and positioned beneath the inward-curved beaks, behind which runs a row of small crenulations. The shell colour is light grey.

Additional remarks from Born 1780.

- **Size:** Long. 4. poll. 8. lin, lat. 9. poll. [122.9 mm, 237.1 mm]
- **Locality:** Habitat in oceano europeo, *Davila*; in mari hispanico, *Lister*.

New measurements. NHMW-ZOO-MO-14490: H: 143 mm, L: 257 mm.

Remarks. Born (1778) mistakenly indicated plate 9 (and not 90) of Gualtieri's 1742 book.

Brauer (1878) mentioned that the original is on display in the exhibition. Based on this information, it was possible to recognise the original specimen in the old stocks of former exhibits. Even though the valves did not feature any labels or marks, the found specimen was the only representative of this species among the old exhibits, and its remarkable size matches well with the measurements reported in Born (1780), making its designation as a syntype plausible.

Class: Scaphopoda Bronn, 1862

Family: Dentaliidae Children, 1834

***Dentalium striatum* Born, 1778**

Current name: the taxonomic status of this name is currently uncertain.

Born common names: German: Das gestreifte Zähnnchen; English: The striated Tooth-Shell.

Fig. 40

Born 1778: p. 449–450. No figure given.

Born 1780: p. 431. No figure given.

Type material. Syntype: NHMW-MO-14450, 1 specimen; Gualtieri (1742), plate 10, fig. G; Hill (1752), plate 7; Martini (1776), plate 1, fig. 5 B.

Original description in Born 1778.

Latin: *Testa octangula, subarcuata, dense striata.*

Differt a praecedenti crassitie minore, et striis densis numerosis.



Figure 40. *Dentalium striatum* Born, 1778. Syntype NHMW-MO-14450: entire specimen (A, B), frontal view of apex with rib pattern (C), section close to the base with distinctive colouration (D), frontal view of aperture (E), apical section (F), side views of basal sections with aperture (G, H). Scale bar: 1 cm.

German: Die Schale ist achteckig, etwas gekrümmt, und mit Streifen dicht besetzt.

Diese Art unterscheidet sich von der vorigen durch ihre Dünne, und die vielen gedrängt an einander stehenden Streifen.

Translation into English: The shell is octangular, slightly curved and densely striated.

This species differs from the previous one by having a thinner shell and numerous, closely spaced stripes.

Additional remarks from Born 1780.

– **Size:** Long. 2. poll. 9. lin, lat. baseos 2. lin. [72.4 mm, 4.4 mm]

– **Locality:** Habitat ad littora Siciliae, Martini.

New measurements. NHMW-ZOO-MO-14450: L: 71 mm, aperture diameter: 5 mm.

Phylum Brachiopoda Duméril, 1805

Class Rhynchonellata Williams, Carlson, Brunton, Holmer & Popov, 1996

Family Terebratulidae Gray, 1840

***Anomia vitrea* Born, 1778**

Current name: ***Gryphus vitreus* (Born, 1778)**

Born common names: German: Die Glasbohrmuschel

Fig. 41

Born 1778: p. 104. No figure given.

Born 1780: p. 119. No figure given.

Type material. Syntypes: NHMW-ZOO-MO-14126, 1 complete specimen; Knorr (1769), Part 4, plate XXX, fig. 4; da Costa (1776), plate 6, fig. 3; Argenville (1757), Suppl. plate 3, fig. E.

Original description in Born 1778.

Latin: *Testa ovata convexa laevi, valvae alterius apice incurvato pertuso, margine integerrimo.*

Ob plicarum defectum a Terebratula Linnaei distinguenda. Testa ovata laevis tenuissima, instar membranae pellucida. Valvae convexae [wahrschl. Druckfehler: Wortverdoppelung] convexae absque striis, aut plicis. Valva superior ovata, postice in apicem incurvata prominentem & pertusum; Foramen repletum ligamento filiformi. Valva inferior rotunda, postice gerens callos. Margo tenuis, clausus, integerrimus, anticus retusus. Color albus.

German: Die eyförmige bäuchige glatte Schale ist an der schnabelförmigen Spitze der einen Klappe durchbohret, und am Rande ganz.

Sie muss wegen ihrer ungefalteten Oberfläche von der Bohrmuschel des Linné unterschieden werden. Die Schale ist eyförmig glatt, von der Dünne einer feinen Haut, und durchsichtig. Beide Klappen sind bäuchig, ohne Streifen und Falten. Die obere ist eyförmig, und verlängert sich in eine gekrümmte oder schnabelförmige hervorragende durchbohrte Spitze, in deren Oefnung sich ein fadenförmiges Band befindet. Die untere Klappe ist rund, und hinten mit zween Schwüllen versehen. Der Rand ist dünn, geschlossen, ganz, und vorne stumpf. Die ganze Schale weiß.

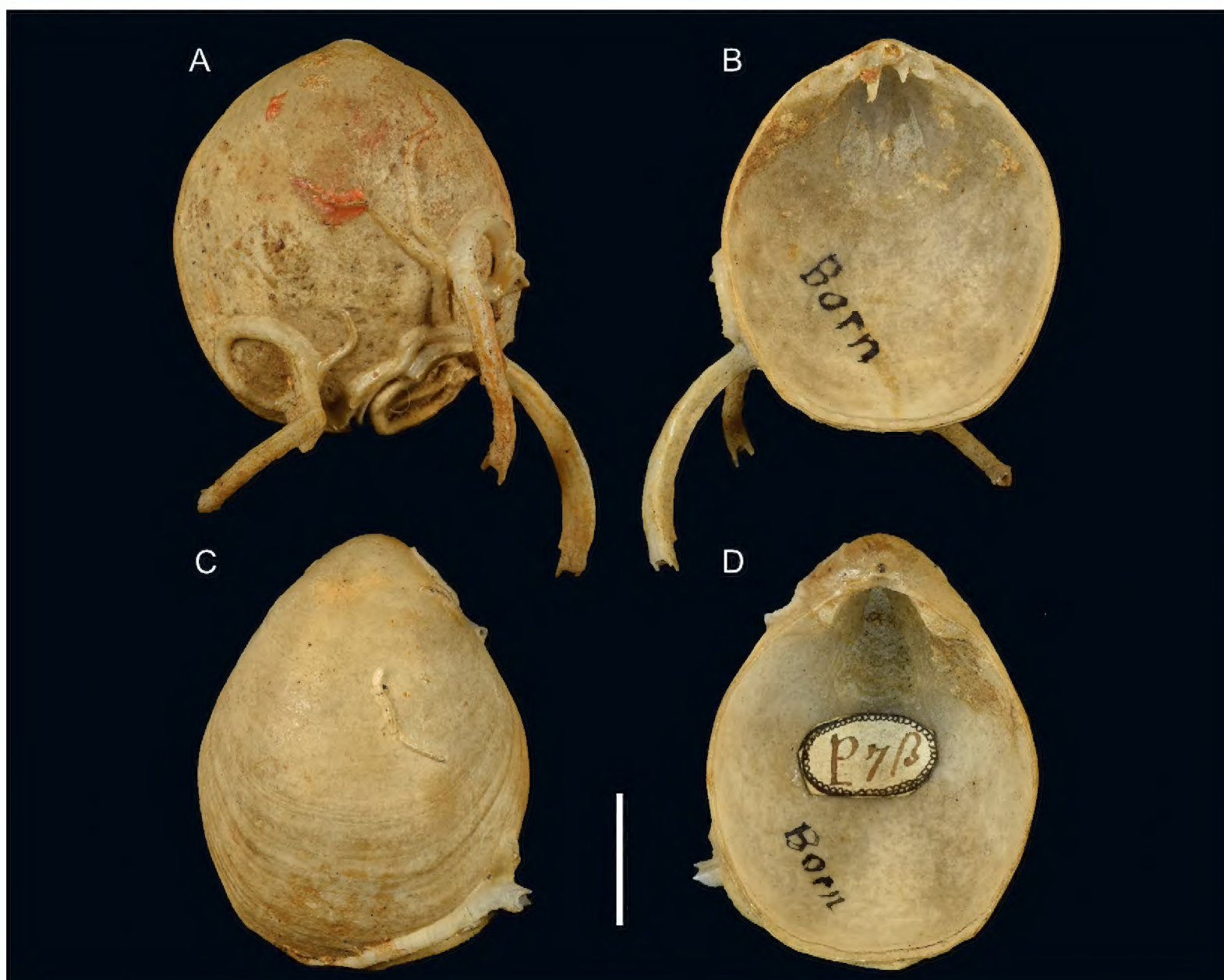


Figure 41. *Anomia vitrea* Born, 1778. Syntype NHMW-ZOO-MO-14126: brachial (dorsal) valve with attached polychaete tubes, exterior (A) and interior (B), pedicle (ventral) valve exterior (C) and interior (D). Scale bar: 1 cm.

Translation into English: Shell ovate, convex, smooth, one valve perforated at the beak-shaped umbo, margin completely smooth.

Has to be distinguished from Linnaeus's *Terebratula* due to the absence of wrinkles on its surface. The shell is ovate, smooth, as thin as a membrane, and transparent. Both valves are bulging, without stripes or folds. The upper valve is ovate, posteriorly extending into a curved, projecting and perforated tip. A filiform ligament is located in the foramen. The lower valve is round and features two callosities at the back. The margin is thin, closed, smooth, and blunt at the front. The entire shell is white.

Additional remarks from Born 1780.

- **Common Names:** French: La Poulette, *Davila*.
- **Size:** Long. 1. poll. 2. lin., lat. 11. lin. [30.7 mm, 24.1 mm]
- **Locality:** Habitat ad Portum Magonis Hispaniae [Maó, Minorca Island, Spain], *Davila*; ad insulas magelanicas, *Knorr*.

New measurements. NHMW-ZOO-MO-14126: H: 33.1 mm, L: 25.1 mm.

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